

#### Indiana State Teachers' Retirement Fund

# 2003 Fiscal Operations Report



#### **BOARD OF TRUSTEES**

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William E. Christopher, Ph.D.

JOSEPH E. KERNAN, Governor
WILLIAM E. CHRISTOPHER, Ph.D., Executive Director

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November 1, 2003

The Honorable Joseph Kernan Governor of the State of Indiana Members of the General Assembly State House Indianapolis, IN 46204

Dear Governor Kernan and Members of the General Assembly:

It is our privilege to submit the 2003 Fiscal Operations Report of the Indiana State Teachers' Retirement Fund (ISTRF) as required by I.C.5-10.2-2-1. It is rewarding for Fund administrators and staff to look at a statistical measure of the many accomplishments that have been made over the last several years.

In addition to statistical data, actuarial information, investment performance and benchmark data, charts for comparison by year and by peer (other state Funds) are available. The report also provides financial statements in several key areas.

Our goals and projects from 2001 to the present can be found at the end of the report. While many projects continue to be ongoing in nature, many goals have been met with positive results. Our number one goal remains; to prudently manage the Fund in accordance with fiduciary standards, provide quality benefits and deliver a high level of service to past and present Indiana teachers, while demonstrating responsibility to the citizens of the State of Indiana.

Respectfully submitted,

William E Christopher, Ph.D.

Executive Director

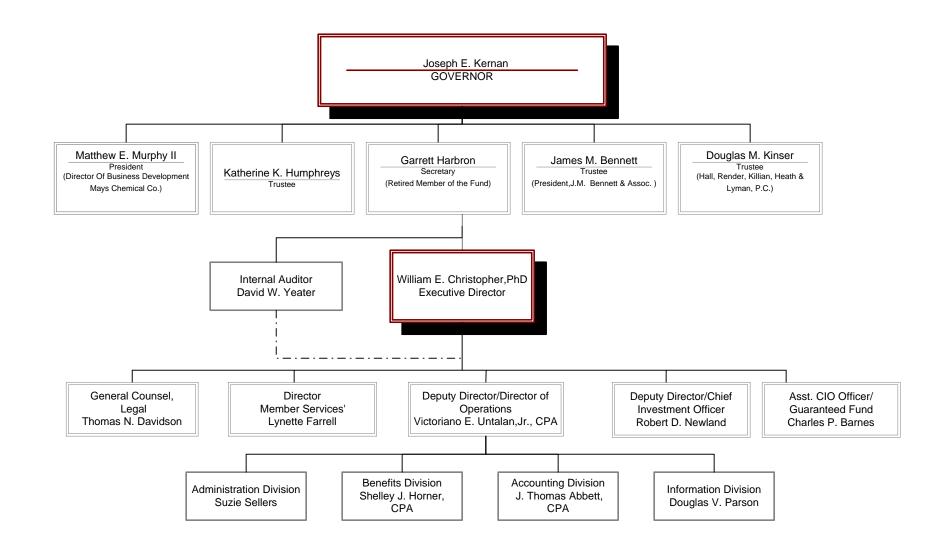
## Mission Statement

The mission of the Indiana State Teachers' Retirement Fund is to prudently manage the Fund in accordance with fiduciary standards, provide quality benefits, and deliver a high level of service to its members, while demonstrating responsibility to the citizens of the State.

## Core Values

The Indiana State Teachers' Retirement Fund, as an organization, holds the following core values in all of its working relationships:

- professionalism, respect, and compassion in dealing with others;
- diversity, both of ideas and people;
- open communication, collaboration, and cooperation;
- integrity and the avoidance of conflicts of interest;
- courtesy and timeliness;
- accountability;
- innovation and flexibility; and
- commitment to and focus on our mission.



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#### **INDIANA STATE TEACHERS' RETIREMENT FUND**

#### **STATEMENT OF PLAN ASSETS**

#### **AS OF JUNE 30, 2003 AND 2002**

		<u>2003</u>		<u>2002</u>
Assets				
Cash and Short-Term Investments	\$	\$813,083,965.72	\$	743,438,281.86
Securities Lending Collateral		967,448,636.84		553,452,341.59
	_	1,780,532,602.56	_	1,296,890,623.45
Receivables				
Employer Contributions Receivable		35,825,516.00		35,481,632.22
Member Contributions Receivable		27,974,511.11		28,270,488.68
Investments Sold		60,095,218.95		166,877,929.53
Investment Income		31,484,239.28		37,308,245.99
Total Receivables		155,379,485.34	_	267,938,296.42
Investments of Fair Value				
Investments, at Fair Value				
Bonds		3,031,449,641.65		3,022,776,332.26
Equity Investments		2,400,127,247.61		2,246,470,767.96
Real Estate (at cost)	_	260,000.00		260,000.00
Total Investments	_	5,431,836,889.26	_	5,269,507,100.22
Furniture and Equipment, at cost, net of accumulated depreciation of \$ 365,873.38				
and \$ 365,873.38, respectively	_	88,843.32	_	46,085.89
Prepaid Expenses		26.75		26.75
Total Assets		7,367,837,847.23		6,834,382,132.73
Liabilities				
Accounts Payable		3,849,409.02		7,632,646.59
Securities Lending Collateral		967,448,636.84		553,452,341.59
Payable for Investments Purchased	_	242,882,913.25	_	544,492,903.64
Total Liabilities		1,214,180,959.11	_	1,105,577,891.82
Net Assets held in trust for				
pension benefits	\$	6,153,656,888.12	\$_	5,728,804,240.91

#### **INDIANA STATE TEACHERS' RETIREMENT FUND**

#### STATEMENT OF CHANGES IN PLAN NET ASSETS

#### FOR THE FISCAL YEAR ENDED JUNE 30, 2003 AND 2002

Additions		<u>2003</u>		<u>2002</u>
Contributions:				
Employer	\$	478,148,545.83	\$	452,680,790.34
Employer - Pension Stabilization		30,000,000.00		30,000,000.00
Employer - 96 Fund		94,083,229.63		83,545,867.69
Fund Member	_	108,843,965.19	_	105,996,375.07
Total Contributions	_	711,075,740.65	-	672,223,033.10
Investment Income				
Net Appreciation (Depreciation)		138,621,646.78		(379,687,582.19)
Interest		174,797,678.50		215,889,925.60
Dividends		38,389,659.54		19,924,600.11
Securities Lending Income		1,041,853.94	_	1,353,272.47
		352,850,838.76		(142,519,784.01)
Less Investment Expense:				
Investment Fees		(11,782,712.14)		(12,090,707.02)
Securities Lending Fees		0.00		0.00
Net Investment Income	_	341,068,126.62	-	(154,610,491.03)
Transfers from PERF	_	0.00	_	3,176,325.58
Adjustments to Accounts Payable		3.93		35.45
Gift from Members		0.00		0.00
Transfer of Outdated Checks	_	(51,146.91)	_	777,952.72
Total Additions	_	1,052,092,724.29	-	521,566,855.82
Deductions				
Benefits		611,607,468.77		588,378,894.11
Voluntary and Death Withdrawals		7,396,641.39		6,449,873.97
Administrative Expense		4,921,539.85		4,113,921.64
Capital Projects		3,297,613.50		1,238,838.16
Depreciation Expenses		16,813.57		12,745.03
Transfers to PERF	_	0.00	_	3,345,500.19
Total Deductions	_	627,240,077.08	_	603,539,773.10
Net Increase		424,852,647.21		(81,972,917.28)
Net assets held in trust for pension ben	efits	· · · · · · · · · · · · · · · · · · ·		
Beginning of year	_	5,728,804,240.91	_	5,810,777,158.19
End of Year	\$_	6,153,656,888.12	\$_	5,728,804,240.91

-UNAUDITED-

ADMINISTRATIVE EXPENSES FISCAL YEAR ENDED JUNE 30, 20	003
PERSONAL SERVICES:  TRUSTEES PER DIEMS STAFF SALARIES SOCIAL SECURITY RETIREMENT INSURANCE PERSONNEL RECLASSIFICATION/ADDITIONAL STAFFING TEMPORARY SERVICES Total Personal Services	\$10,080.00 \$2,008,898.88 \$153,678.64 \$173,597.95 \$355,590.09 \$0.00 \$1,563.12 \$2,703,408.67
PROFESSIONAL & TECHNICAL SERVICES:	
ACTUARIAL DATA PROCESSING Y2K Services HEALTH INSURANCE CONSULTANT DATA PROCESSING CONSULTANT AUDIT STRATEGIC PLANNING CONSULTING BENCHMARKING Compensation Classification Consulting LEGAL SERVICES MEDICAL EXAMINATIONS PENSION DEATH RECORD COMPARISON(PBI) TOTAL PROFESSIONAL & TECHNICAL SERVICES	\$190,587.00 \$490,868.46 \$0.00 \$9,600.00 \$0.00 \$37,852.00 \$0.00 \$25,000.00 \$0.00 \$135,081.77 \$4,265.25 \$25,862.93 \$919,117.41
COMMUNICATION: PRINTING TELEPHONE POSTAGE TRAVEL TOTAL COMMUNICATION	\$334,002.26 \$130,270.07 \$409,970.97 \$45,063.51 \$919,306.81
MISCELLANEOUS:  ADMINISTRATIVE LEGAL SERVICES  MEMBERSHIP & TRAINING  EQUIPMENT RENTAL  SUPPLIES  MAINTENANCE	\$8,620.25 \$72,124.41 \$12,705.00 \$59,110.06 \$9,544.32

**TOTAL MISCELLANEOUS** 

**BONDING** 

**DEPRECIATION** 

TOTAL ADMINISTRATIVE EXPENSES

**OFFICE RENT** 

\$2,019.00

\$16,813.57

\$215,583.92 \$396,520.53

#### **SCHEDULE OF INVESTMENT EXPENSES**

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National City Corporation	\$568,431.75
The Northern Trust Company	<u>\$50,000.00</u>
Total Custodial	\$618,431.75

Investment Consultant \$330,000.00

Investment Benchmarking

#### Management

## Fixed Income Managers

Alliance Capital Mgmt.	\$1,077,146.00
Reams Asset Mgmt.	\$1,502,478.00
Taplin, Canida, Habacht	\$106,657.31

#### **Equity Managers**

Barclays	\$132,852.91
Rhumbline	\$90,173.23
PIMCO	\$1,188,003.00
Dresdner	\$761,546.00
Bank of Ireland Asset Management	\$843,586.00
Alliance Capital Management	\$138,014.00
Earnest Partners, LLC	\$118,084.00
GE Asset Management	\$140,931.00
Institutional Capital Corp.	\$145,024.00
Pacific Financial Research, Inc.	\$202,443.00
Enhanced Investment Technologies, Inc.	\$183,548.53
Holt-Smith & Yates Advisors	\$186,141.00
Dresdner RCM Global Advisors	\$184,966.00
Putnam	\$296,928.95
Franklin	\$183,929.76
Valenzuela Capital Partners	\$135,307.24
Aeltus	\$808,105.68
TCW	\$477,907.83
Ariel Capital Management	\$713,338.37
Brandywine Asset Management, Inc.	\$677,658.27
Portfolio Advisors, Inc.	\$345,000.00

Total Money Management Fees \$10,639,770.08

Investment Management Software	\$36,000.00
Investment Transaction Fees	\$22,074.53
Administrative Investment Fees	<u>\$136,435.78</u>
Total Investment Fees	\$11,782,712.14

## **CAPITAL PROJECTS**

	TRF SHARED COST					PERF/TRF	
NEW RETIREMENT INFORMATION SYSTEM		L YEAR 2003	<u>L</u>	IFE TO DATE	TOTAL PROJECT	TC	OTAL PROJECT COST
SYSTEM DESIGN AND DEVELOPMENT		3,138,853.50	\$	7,053,701.93	\$10,192,555.43	\$	19,075,508.00
PROJECT QUALITY ASSURANCE	\$	-	\$	593,742.50	\$ 593,742.50	\$	869,673.00
PROJECT MANAGER	\$	-	\$	611,470.00	\$ 611,470.00	\$	1,343,881.37
OUTSOURCING SERVICES	\$	158,760.00	\$	158,760.00	\$ 158,760.00		N/A
TOTAL CAPITAL PROJECTS	\$	3,297,613.50	\$	8.417.674.43	\$ 11,556,527.93	\$	21,289,062.37

#### **SCHEDULE OF FUNDING PROGRESS**

(Dollar amounts in millions)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/77	\$346	\$2,145	\$1,799	16.13%	\$892	201.68%
6/30/79	417	2,582	2,165	16.15%	1,025	211.22%
6/30/81	484	2,957	2,473	16.37%	1,195	206.95%
6/30/83	747	3,338	2,591	22.38%	1,350	191.93%
6/30/85	1,091	4,023	2,932	27.12%	1,520	192.89%
6/30/87	1,409	4,837	3,428	29.13%	1,752	195.66%
6/30/89	1,737	6,205	4,468	27.99%	2,045	218.48%
6/30/91	2,190	7,182	4,992	30.49%	2,279	219.04%
6/30/92	2,496	7,949	5,453	31.40%	2,416	225.70%
6/30/93	2,812	8,508	5,696	33.05%	2,536	224.61%
6/30/94	2,768	9,087	6,319	30.46%	2,615	241.64%
6/30/95	3,103	9,675	6,572	32.07%	2,729	240.82%
6/30/96	3,263	10,331	7,068	31.58%	2,879	245.50%
6/30/97	3,750	11,044	7,294	33.96%	2,985	244.39%
6/30/98	4,266	11,779	7,513	36.22%	3,095	242.75%
6/30/99	4,971	12,671	7,700	39.23%	3,294	233.76%
6/30/00	5,578	13,115	7,537	42.53%	3,283	229.58%
6/30/01	5,810	13,524	7,714	42.96%	3,318	232.49%
6/30/02	6,176	14,665	8,489	42.11%	3,610	235.15%

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS

(DOLLARS IN THOUSANDS)

YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	CONTRIBUTED BY EMPLOYERS	CONTRIBUTED BY THE STATE	PERCENTAGE CONTRIBUTED
	(a)	(b)	(c)	((b + c) /a)
1981	\$181,640	\$2,858	\$107,588	60.80%
1983	181,575	2,503	93,207	52.71%
1985	214,776	5,910	174,399	83.95%
1987	236,695	6,810	129,907	57.76%
1989	319,429	7,804	154,627	50.85%
1991	357,575	8,539	232,861	67.51%
1992	394,291	9,377	197,250	52.40%
1993	413,622	9,180	194,900	49.34%
1994	433,044	11,013	219,782	53.30%
1995	456,835	10,977	228,200	52.36%
1996	488,278	15,907	297,451	64.18%
1997	508,939	28,761	508,867	105.64%
1998	508,260	41,098	424,252	91.56%
1999	524,815	56,650	555,700	116.68%
2000	547,532	70,641	576,800	118.25%
2001	537,789	83,285	605,900	128.15%
2002	572,226	100,826	465,400	98.95%
2003	638,541	111,931	490,300	94.31%

#### **PENSION STABILIZATION FUND**

DATE	TRANSACTION DESCRIPTION	CONTRIBUTIONS	INTEREST EARNED	BALANCE
1995				
JULY 1	ESTABLISHMENT OF ACCOUNT			\$439,700,498.50
1996				
	CONTRIBUTIONS FROM STATE	\$25,000,000.00		\$464,700,498.50
	CONTRIBUTIONS FROM LOTTERY	\$30,000,000.00		\$494,700,498.50
	CONTRIBUTIONS FROM STATE	\$92,851.68		\$494,793,350.18
	INTEREST CREDITED		\$39,573,044.87	\$534,366,395.05
1997		•		
	CONTRIBUTIONS FROM STATE	\$24,999,998.97		\$559,366,394.02
	CONTRIBUTIONS FROM STATE	\$200,000,000.00		\$759,366,394.02
	CONTRIBUTIONS FROM STATE	\$93,567.95		\$759,459,961.97
	CONTRIBUTIONS FROM LOTTERY	\$30,000,000.00	¢45 404 440 50	\$789,459,961.97
1998	INTEREST CREDITED		\$45,421,143.58	\$834,881,105.55
	CONTRIBUTIONS FROM STATE	\$75,000,000.00		\$000 004 405 FF
	CONTRIBUTIONS FROM STATE  CONTRIBUTIONS FROM STATE	\$75,000,000.00		\$909,881,105.55 \$909,959,391.83
	CONTRIBUTIONS FROM LOTTERY	\$30,000,000.00		\$939,959,391.83
	INTEREST CREDITED	ψ50,000,000.00	\$66,790,488.44	\$1,006,749,880.27
1999	INTEREST GREDITED		φου, εου, που. ππ	ψ1,000,140,000.21
	CONTRIBUTIONS FROM STATE	\$75,000,000.00		\$1,081,749,880.27
	CONTRIBUTIONS FROM STATE	\$75,639.23		\$1,081,825,519.50
	CONTRIBUTIONS FROM LOTTERY	\$30,000,000.00		\$1,111,825,519.50
	INTEREST CREDITED	+ , ,	\$80,539,990.42	\$1,192,365,509.92
JUNE 30	DISTRIBUTION FROM UNDISTRIBUTED INVESTMENT INCOM	E	\$148,512,367.47	\$1,340,877,877.39
2000				
JUNE 30	CONTRIBUTIONS FROM STATE	\$125,000,000.00		\$1,465,877,877.39
JUNE 30	CONTRIBUTIONS FROM LOTTERY	\$37,500,000.00		\$1,503,377,877.39
JUNE 30	CONTRIBUTIONS FROM STATE	\$38,810.02		\$1,503,416,687.41
	FUNDS FROM PENSION PAYOUTS	\$15,506,789.63		\$1,518,923,477.04
	INTEREST/EARNINGS CREDITED		\$117,863,098.59	\$1,636,786,575.63
	DISTRIBUTION FROM UNDISTRIBUTED INVESTMENT INCOM	E	\$35,860,604.81	\$1,672,647,180.44
2001				
	CONTRIBUTIONS FROM STATE	\$125,000,000.00		\$1,797,647,180.44
	CONTRIBUTIONS FROM LOTTERY	\$30,000,000.00		\$1,827,647,180.44
	CONTRIBUTIONS FROM STATE	\$45,735.83		\$1,827,692,916.27
	FUNDS FROM PENSION PAYOUTS	\$19,650,613.19	(\$14.202.550.50)	\$1,847,343,529.46
2002	INTEREST/EARNINGS CREDITED		(\$14,302,550.56)	\$1,833,040,978.90
	CONTRIBUTIONS FROM LOTTERY	\$30,000,000.00		\$1 863 040 070 00
	CONTRIBUTIONS FROM LOTTERY  CONTRIBUTIONS FROM STATE	\$43,876.37		\$1,863,040,978.90 \$1,863,084,855.27
	FUNDS FROM PENSION PAYOUTS	\$13,798,154.19		\$1,876,883,009.46
	INTEREST/EARNINGS CREDITED	ψ10,100,10 <del>4</del> .18	(\$90,065,130.79)	\$1,786,817,878.67
2003	INTERCOTAL ANTHONY OF CONTROL		(ψου,ουο, 1ου.7 9)	ψ1,100,011,010.01
	CONTRIBUTIONS FROM LOTTERY	\$30,000,000.00		\$1,816,817,878.67
	CONTRIBUTIONS FROM STATE	\$34,359.51		\$1,816,852,238.18
	FUNDS FROM PENSION PAYOUTS	\$19,287,539.68		\$1,836,139,777.86
	INTEREST/EARNINGS CREDITED	\$23,654,725.65		\$1,859,794,503.51
POINE 20	INTEREST/EARININGS CREDITED	φ∠ა,υυ4, <i>1</i> ∠3.05		φ1,009, <i>1</i> 94,003.51

#### SCHEDULE OF ALLOTMENTS RECEIVED AND ACTUAL PAYOUTS

FISCAL YEAR 02-03

STATE PENSION(100-745)				COLA'S (10		
MONTH*	ACTUAL PAYOUT	ALLOTMENTS RECEIVED	OVERPAYMENT (SHORTAGE)	ACTUAL PAYOUT	ALLOTMENTS RECEIVED	OVERPAYMENT (SHORTAGE)
2002-03						
JULY	\$32,720,972	\$35,341,667	\$2,620,695	\$2,961,841	\$3,991,667	\$1,029,826
AUGUST	\$34,894,350	\$35,341,667	\$447,317	\$2,940,784	\$3,991,667	\$1,050,883
SEPT.	\$34,477,412	\$35,341,667	\$864,255	\$2,919,557	\$3,991,667	\$1,072,110
OCT.	\$34,135,816	\$35,341,667	\$1,205,851	\$2,890,064	\$3,991,667	\$1,101,603
NOV.	\$33,790,472	\$35,341,667	\$1,551,195	\$2,868,221	\$3,991,667	\$1,123,446
DEC.	\$33,508,413	\$35,341,667	\$1,833,254	\$2,839,921	\$3,991,667	\$1,151,746
JAN.	\$33,521,647	\$35,341,667	\$1,820,019	\$3,311,796	\$3,991,667	\$679,871
FEB.	\$33,519,046	\$35,341,667	\$1,822,621	\$3,279,788	\$3,991,667	\$711,879
MARCH	\$33,433,315	\$35,341,667	\$1,908,351	\$3,253,289	\$3,991,667	\$738,378
APRIL	\$33,471,807	\$35,341,667	\$1,869,859	\$3,224,562	\$275,000	(\$2,949,562)
MAY	\$33,240,318	\$35,341,667	\$2,101,349	\$3,199,166	\$0	(\$3,199,166)
JUNE	\$34,098,893	\$35,341,667	\$1,242,773	\$3,141,299	<u>\$0</u>	(\$3,141,299)
	\$404,812,460.32	\$424,100,000.00	\$19,287,539.68	\$36,830,288.00	\$36,200,000.03	(\$630,287.97)

<sup>\*</sup> MONTH IS FOR THE MONTH BENEFITS ARE PAYABLE FOR, NOT THE MONTH THEY ARE PAID IN (i.e.; MONTH OF JULY IS PAID ON AUGUST 1.)



INDIANA STATE TEACHERS' RETIREMENT FUND							
ACTUARIAL SUMMARY							
	<u>June 30, 2002</u>	<u>June 30, 2001</u>	<u>CHANGE</u>				
PRE- 96 FUND UNFUNDED ACCRUED LIABILITY	\$7,942,425,773	\$7,332,289,878	\$610,135,895				
96 FUND UNFUNDED ACCRUED LIABILITY	\$545,660,932	<u>\$380,776,531</u>	<u>\$164,884,401</u>				
TOTAL ACTUARIAL LIABILITY	<u>\$8,488,086,705</u>	<u>\$7,713,066,409</u>	<u>\$775,020,296</u>				

#### ACTUARIAL ANALYSIS OF CHANGE IN ACTUARIAL LIABILITY FROM PREVIOUS YEAR'S VALUATION:

#### PRE - 96 FUND:

DURING THE YEAR ENDED JUNE 30, 2002, UNFUNDED ACTUARIAL ACCRUED LIABILITY IN THE CLOSED PLAN INCREASED \$610.1 MILLION. THE INCREASE WAS THE RESULT OF THE ACTUARIAL VALUE OF PLAN ASSETS INCREASING BY \$191.9 MILLION, WHILE THE ACTUARIAL ACCRUED LIABILITY WAS INCREASING BY \$802.0 MILLION.

#### **96 FUND:**

DURING THE YEAR ENDED JUNE 30, 2002, UNFUNDED ACTUARIAL ACCRUED LIABILITY IN THE 1996 PLAN INCREASED \$164.9 MILLION. THE NORMAL GROWTH IN LIABILITIES FOR THIS PLAN IS A RESULT OF NEW TEACHERS BEING HIRED AND EXISTING TEACHERS EARNING ANOTHER YEAR OF BENEFIT SERVICE. IN ADDITION, THE ACTUARIAL ACCRUED LIABILITY CONTINUES TO INCREASE AS A RESULT OF THE PRIOR SERVICE RENDERED BY FORMER CLOSED PLAN MEMBERS WHOSE TOTAL SERVICE IS NOW COVERED BY THE 1996 PLAN AS A RESULT OF REHIRE OR CHANGE IN EMPLOYMENT.

#### NOTE:

THE FOLLOWING TWO PAGES CONTAIN ACTUARIAL DETAILS FOR THE FISCAL YEARS ENDED JUNE 30, 2001 AND JUNE 30,2002.

#### **REPORTED ASSETS**

The accrued assets at market value as of June 30, 2002 were reported to be \$5,722,753,180 and were allocated for valuation purposes as follows:

#### **Reported Assets (Market Value Basis)**

Reserve Allocation	Closed Plan	New Plan	<u>Total</u>
Member Reserves:			
Active and Inactive	\$2,551,239,549	\$270,056,637	\$2,821,296,186
Retired	565,804,709	1,640,952	567,445,661
Total Member Reserves	3,117,044,258	271,697,589	3,388,741,847
Employer Reserves:			
Active	-	289,162,091	289,162,091
Retired			
Pension Stabilization Fund	1,786,817,879	-	1,786,817,879
Other	<u>243,312,830</u>	14,718,533	<u>258,031,363</u>
Total	2,030,130,709	14,718,533	2,044,849,242
Total Employer Reserves	2,030,130,709	303,880,624	2,334,011,333
Total Reserves	\$5,147,174,967	\$575,578,213	\$5,722,753,180

#### **Actuarial Accrued Liability: Computed and Unfunded**

	Closed Plan	New Plan	<u>Total</u>
Retired Member and Beneficiaries:			
Computed accrued liability	\$4,411,727,837	\$17,338,655	\$4,429,066,492
Allocated assets (market value)	2,595,935,418	16,359,485	2,612,294,903
Funding Value adjustment	205,860,864	1,297,328	207,158,192
Unfunded Accrued Liability	1,609,931,555	(318,158)	1,609,613,397
Active and Inactive Members:			
Computed accrued liability	9,086,050,193	1,149,544,549	10,235,594,742
Allocated assets (market value)	2,551,239,549	559,218,728	3,110,458,277
Funding Value adjustment	202,316,426	44,346,731	246,663,157
Unfunded Accrued Liability	6,332,494,218	545,979,090	6,878,473,308
ISTRF Total:			
Computed accrued liability	13,497,778,030	1,166,883,204	14,664,661,234
Allocated assets (market value)	5,147,174,967	575,578,213	5,722,753,180
Funding Value adjustment	408,177,290	45,644,059	453,821,349
Unfunded Accrued Liability	\$7,942,425,773	\$545,660,932	\$8,488,086,705

#### **Reported Assets**

The accrued assets at market value as of June 30, 2001 were reported to be \$5,810,759,564 and were allocated for valuation purposes as follows:

Reserve Allocation	Closed Plan	New Plan	Total
Member Reserves:			
Active and Inactive	\$2,668,945,655	\$210,932,183	\$2,879,877,838
Retired	618,238,221	1,138,375	619,376,596
Total Member Reserves	3,287,183,876	212,070,558	3,499,254,434
Employer Reserves:			
Active	-	223,259,318	223,259,318
Retired			- <b>, ,</b>
Pension Stabilization Fund	1,833,040,979	-	1,833,040,979
Other	243,272,958	11,931,875	255,204,833
Total	2,076,313,937	11,931,875	2,088,245,812
Total Employer Reserves	2,076,313,937	235,191,193	2,311,505,130
Total Reserves	\$5,363,497,813	\$447,261,751	\$5,810,759,564

## ACTUARIAL ACCRUED LIABILITY: COMPUTED AND UNFUNDED

Amounts at June 30, 2001	Closed Plan	New Plan	Total
Retired Members and Beneficiaries:			
Computed accrued liability	\$ 4,121,359,222	\$12,080,801	\$ 4,133,440,023
Allocated assets	2,694,552,158	13,070,250	2,707,622,408
Unfunded Accrued Liability	1,426,807,064	(989,449)	1,425,817,615
Active and Inactive Members:			
Computed accrued liability	8,574,428,469	815,957,481	9,390,385,950
Allocated assets	2,668,945,655	434,191,501	3,103,137,156
Unfunded Accrued Liability	5,905,482,814	381,765,980	6,287,248,794
ISTRF Total:			
Computed accrued liability	12,695,787,691	828,038,282	13,523,825,973
Allocated assets	5,363,497,813	447,261,751	5,810,759,564
Unfunded Accrued Liability	\$ 7,332,289,878	\$380,776,531	\$ 7,713,066,409

The report of the annual actuarial valuation as of June 30, 2001

# CLOSED PLAN BALANCE SHEET SUMMARY STATEMENT OF FUND RESOURCES AND OBLIGATIONS

#### PRESENT RESOURCES AND EXPECTED FUTURE RESOURCES

	<u>Annuitites</u>	<u>Pensions</u>	<u>Total</u>
A. Funding value of system assets			
<ol> <li>Net assets fron Fund Financial statements</li> </ol>	\$3,117,044,258	\$2,030,130,710	\$5,147,174,968
2. Funding value adjustment	247,185,434	<u>160,991,856</u>	408,177,290
3. Funding value of assets	3,364,229,692	2,191,122,566	5,555,352,258
B. Actuarial present value of expected future employer contributions			
1. For normal costs	0	1,879,531,199	1,879,531,199
2. For unfunded actuarial accrued liablility	<u>0</u>	7,942,425,774	7,942,425,774
3. Total	0	9,821,956,973	9,821,956,973
C. Total Present and Future Resources	\$3,364,229,692	\$12,013,079,539	\$15,377,309,231

# ACTUARIAL PRESENT VALUE OF EXPECTED FUTURE BENEFIT PAYMENTS AND RESERVES

	<u>Annuitites</u>	<u>Pensions</u>	<u>Total</u>
A. To retired members and beneficiaries     1. Annual benefits     2. Reserve*	\$607,004,582 3,669,135	<u>0</u>	\$4,408,058,702 3,669,135
3. Totals	610,673,717	3,801,054,120	4,411,727,837
B. To vested terminated members	194,088,740	148,819,638	342,908,378
C. To present active members			
<ol> <li>Allocated to service rendered prior to valuation date</li> </ol>	2,559,467,236	6,183,674,580	8,743,141,816
<ol><li>Allocated to service likely to be rendered after</li></ol>			
valuation date	<u>0</u>	<u>1,879,531,199</u>	<u>1,879,531,200</u>
3. Total	2,559,467,236	8,063,205,779	10,622,673,016
D. Total Actuarial Present Value of Expected Future			
Benefit Payments and Reserves	\$3,364,229,693	\$12,013,079,537	\$15,377,309,231

<sup>\*</sup>The Retired Member Annuity Reserve has a value of less than zero on a Market Value basis.

# NEW PLAN BALANCE SHEET SUMMARY STATEMENT OF FUND RESOURCES AND OBLIGATIONS

#### PRESENT RESOURCES AND EXPECTED FUTURE RESOURCES

	<u>Annuitites</u>	<u>Pensions</u>	<u>Total</u>
A. Funding value of system assets			
1. Net assets fron Fund Financial statements	\$271,697,589	\$303,880,624	\$575,578,213
Funding value adjustment	21,545,952	24,098,107	<u>45,644,059</u>
3. Funding value of assets	293,243,541	327,978,731	621,222,272
B. Actuarial present value of expected future employer contributions			
1. For normal costs	0	1,204,374,700	1,204,374,700
<ol><li>For unfunded actuarial accrued liablility</li></ol>	<u>0</u>	545,660,933	<u>545,660,933</u>
3. Total	0	1,750,035,633	1,750,035,633
C. Total Present and Future Resources	\$293,243,541	\$2,078,014,364	\$2,371,257,905

# ACTUARIAL PRESENT VALUE OF EXPECTED FUTURE BENEFIT PAYMENTS AND RESERVES

	<u>Annuitites</u>	<u>Pensions</u>	<u>Total</u>
<ul><li>A. To retired members and beneficiaries</li><li>1. Annual benefits</li><li>2. Reserve*</li><li>3. Totals</li></ul>	\$1,760,440 <u>10,642</u> 1,771,082	<u>0</u>	\$17,328,013 <u>10,642</u> 17,338,655
B. To vested terminated members	28,009,912	12,558,540	40,568,452
C. To present active members  1. Allocated to service rendered prior to valuation date	263,462,548	845,513,550	1,108,976,098
<ul><li>2. Allocated to service likely to be rendered after valuation date</li><li>3. Total</li></ul>	<u>0</u> 263,462,548		1,204,374,700 2,313,350,798
D. Total Actuarial Present Value of Expected Future Benefit Payments and Reserves	\$293,243,542	\$2,078,014,363	\$2,371,257,905

<sup>\*</sup>The Retired Member Annuity Reserve has a value of less than zero on a Market Value basis.



# ANNUITY SAVINGS ACCOUNT INVESTMENT OPTION RATES OF RETURN FOR THE FISCAL YEAR ENDING JUNE 30:

2003	2002	2001	2000	1999*
0.31%	-17.96%	-14.71%	7.21%	36.37%
-1.33%	-4.46%	7.58%	38.65%	34.66%
-7.15%	-11.98%	-24.13%	26.27%	29.74%
13.85%	5.54%	11.08%	5.99%	1.04%
7.00%	7.50%	7.75%	7.75%	8.00%
	0.31% -1.33% -7.15% 13.85%	0.31% -17.96% -1.33% -4.46% -7.15% -11.98% 13.85% 5.54%	0.31% -17.96% -14.71% -1.33% -4.46% 7.58% -7.15% -11.98% -24.13% 13.85% 5.54% 11.08%	0.31%       -17.96%       -14.71%       7.21%         -1.33%       -4.46%       7.58%       38.65%         -7.15%       -11.98%       -24.13%       26.27%         13.85%       5.54%       11.08%       5.99%

<sup>\*</sup>Results for S&P500 Index, Small Cap Equity and International are for 10/1/98 to 6/30/99.

## RATES OF RETURN FOR EMPLOYER INVESTMENTS FOR THE FISCAL YEAR ENDING JUNE 30:

	2003	2002	2001	2000	1999*
Larga Can Equition	0.760/	47.050/	42.040/	C 740/	20.020/
Large Cap Equities	0.76%	-17.35%	-13.91%	6.74%	30.03%
Mid Cap Equities	-5.10%	-8.60%	1.87%	29.31%	0.00%
Small Cap Equities	-0.76%	-4.26%	7.87%	39.56%	35.26%
International Equities	-8.23%	-11.72%	-24.38%	23.39%	29.15%
Fixed Income	12.17%	6.02%	11.23%	4.83%	3.07%
COMPOSIT RETURN	6.17%	-2.60%	2.08%	10.05%	12.35%

<sup>\*</sup>Results for S&P500 Index, Small Cap Equity and International are for 10/1/98 to 6/30/99.

#### **FUND ASSET ALLOCATION**

	@6/30/03	@6/30/02	@6/30/01	@6/30/00	@6/30/99
Large Cap Equities	25.4%	26.6%	23%	28%	28%
Mid Cap Equities	2.2%	5.9%	5%	6%	0%
Small Cap Equities	8.8%	4.5%	6%	6%	5%
International Equities	8.7%	16.7%	8%	8%	5%
Alternative Investments	0.3%	0.1%	0%	0%	0%
Fixed Income	54.6%	46.3%	57%	52%	62%
TOTAL	100.0%	100.0%	100%	100%	100%

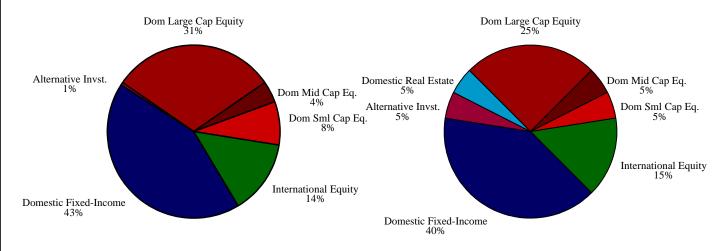


#### **Actual vs Target Asset Allocation**

The top left chart shows the Fund's asset allocation as of June 30, 2003. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the Fund's asset allocation and the target allocation versus the CAI Public Fund Sponsor Database.

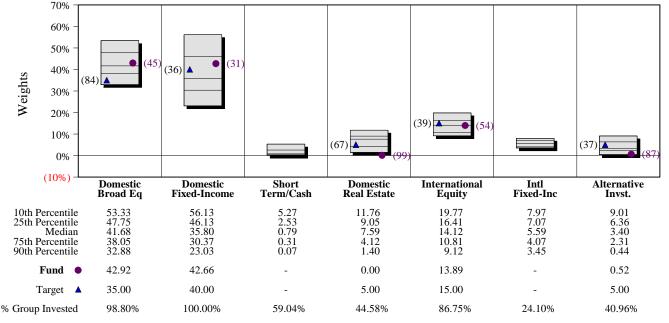
#### **Actual Asset Allocation**

#### **Target Asset Allocation**



Asset Class	\$000s Actual	Percent Actual	Percent Target	Percent Difference	\$000s Difference
Dom Large Cap Equity	1,039,051	30.8%	25.0%	5.8%	194,850
Dom Mid Cap Eq. 1	135,906	4.0%	5.0%	(1.0%)	(32,934)
Dom Sml Cap Eq.	274,485	8.1%	5.0%	3.1%	105,645
International Equity	469,089	13.9%	15.0%	(1.1%)	(37,432)
Domestic Fixed-Income	1,440,648	42.7%	40.0%	2.7%	89,926
Alternative Invst.	17,625	0.5%	5.0%	(4.5%)	(151,215)
Domestic Real Estate	0	0.0%	5.0%	(5.0%)	(168,840)
Total	3.376.803	100.0%	100.0%		

#### Asset Class Weights vs CAI Public Fund Sponsor Database



<sup>\*</sup> Current Quarter Target = 40.0% L/B Agg, 25.0% S&P 500, 15.0% MSCI EAFE Index, 5.0% Russell 2000, 5.0% S&P Mid Cap 400, 5.0% Wilshire Real Estate Idx and 5.0% Post Venture Cap Idx.



#### **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2003, with the distribution as of March 31, 2003.

#### **Asset Distribution Across Investment Managers**

	June 30, 2003		March 31, 2003		
	Market Value	Percent	Market Value	Percent	
Employer Assets	\$3,376,803,479	55.44%	\$2,943,760,543	53.28%	
Domestic Large Cap Equity	1,039,050,642	17.06%	877,407,391	15.88%	
Domestic Mid Cap Equity	135,906,227	2.23%	116,074,393	2.10%	
Domestic Small Cap Equity	274,484,714	4.51%	218,175,469	3.95%	
International Equity	469,088,908	7.70%	395,132,085	7.15%	
Domestic Fixed-Income	1,440,647,649	23.65%	1,325,294,914	23.99%	
Alternative Investment	17,625,339	0.29%	11,676,291	0.21%	
<b>Employee Assets</b>	\$2,713,974,852	44.56%	\$2,581,604,655	46.72%	
Domestic Large Cap Equity	508,033,706	8.34%	465,256,516	8.42%	
Domestic Small Cap Equity	262,095,599	4.30%	222,409,346	4.03%	
International Equity	59,551,271	0.98%	51,078,373	0.92%	
Domestic Fixed-Income	1,884,294,276	30.94%	1,842,860,420	33.35%	
Total Fund	\$6,090,778,331	100.0%	\$5,525,365,198	100.0%	



#### **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2003, with the distribution as of June 30, 2002.

#### **Asset Distribution Across Investment Managers**

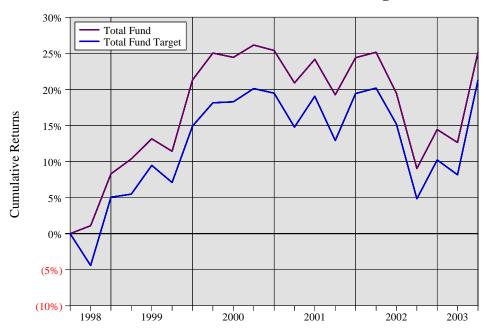
	June 30, 20 Market Value	003 Percent	June 30, 2002 Market Value Percent		
Domestic Equity	\$2,219,570,888	36.44%	\$1,967,083,881	34.71%	
Large Cap Equity	\$1,547,084,348	25.40%	\$1,331,295,059	23.49%	
Passive					
Barclays Global Investors	727,878,123	11.95%	670,138,177	11.83%	
Rhumbline	301,810,358	4.96%	186,869,676	3.30%	
Enhanced	205.405.050	4.0004	257 004 557	4 5004	
PIMCO	297,187,870	4.88%	265,091,665	4.68%	
Growth	22 721 204	0.550/	21 202 152	0.550/	
Dresdner INTECH	33,731,284 41,518,045	0.55% 0.68%	31,303,152 37,103,106	0.55% 0.65%	
H-S&Y	35,224,069	0.58%	33,479,500	0.59%	
Value	33,224,009	0.36%	33,479,300	0.39%	
Earnest	21,358,291	0.35%	19,693,370	0.35%	
GEAM	30,917,559	0.51%	30,275,500	0.53%	
ICAP	25,936,820	0.43%	26,266,471	0.46%	
PFR	31,521,929	0.52%	31,074,442	0.55%	
	31,321,727	0.5270	31,074,442	0.5570	
Mid Cap Equity	\$135,906,227	2.23%	\$177,198,830	3.13%	
Core					
Franklin Associates	84,604,439	1.39%	60,140,201	1.06%	
Growth					
Putnam Investments	51,301,788	0.84%	58,495,079	1.03%	
Value			50 550 550	4.000	
Valenzuela Capital Partners	-	-	58,563,550	1.03%	
Small Cap Equity	\$536,580,313	8.81%	\$458,589,992	8.09%	
Growth					
Aeltus Capital Management	136,559,442	2.24%	94,727,487	1.67%	
TCW Group	66,372,956	1.09%	67,073,781	1.18%	
Value					
Ariel Capital Management	187,463,607	3.08%	141,340,723	2.49%	
Brandywine Capital Mgmt	146,184,308	2.40%	155,448,001	2.74%	
nternational Equity	\$528,640,179	8.68%	\$576,055,495	10.17%	
Alliance Capital Mgmt	183,780,120	3.02%	195,048,809	3.44%	
Bank of Ireland	179,260,313	2.94%	196,545,212	3.47%	
Dresdner RCM Global	165,599,746	2.72%	184,461,474	3.26%	
tomostic Fired Incom-	¢2 224 041 025	54 500/	¢2 130 157 310	EE 0/0/	
Oomestic Fixed-Income	\$3,324,941,925 1,500,212,385	<b>54.59%</b>	\$3,120,156,219 1,470,250,540	55.06%	
Alliance Capital Mgmt	1,590,212,385	26.11%	1,479,259,549	26.10%	
Reams Asset Management Seix Investment Advisors	1,564,713,830	25.69%	1,469,742,361	25.94%	
Taplin, Canida & Habacht	68.251.508	1.12%	166,194 61.986,556	0.00% 1.09%	
Cash Flow Account	101,764,202	1.67%	109,001,559	1.92%	
Alternative Investment Porfolio Advisors	<b>\$17,625,339</b> 17,625,339	<b>0.29%</b> 0.29%	<b>\$3,709,421</b> 3,709,421	<b>0.07%</b> 0.07%	
1 OHOHO AUVISOIS	17,023,339	0.27/0	3,709,421	0.0770	



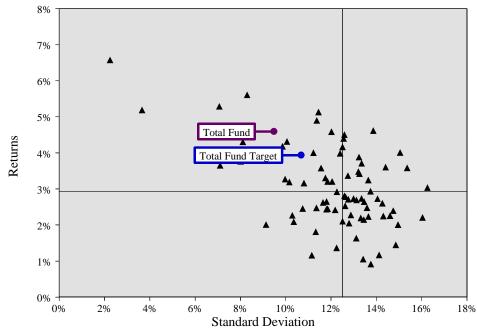
#### **Cumulative Performance Relative to Target**

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the plans in the Public Plan Sponsor Database.

#### **Cumulative Returns Actual vs Target**



#### Five Year Annualized Risk vs Return



Triangles represent membership of the CAI Public Fund Sponsor Database

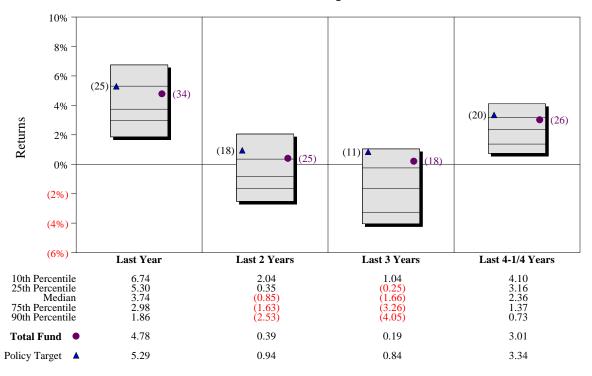
<sup>\*</sup> Current Quarter Target = 40.0% L/B Agg, 25.0% S&P 500, 15.0% MSCI EAFE Index, 5.0% Russell 2000, 5.0% S&P Mid Cap 400, 5.0% Wilshire Real Estate Idx and 5.0% Post Venture Cap Idx.



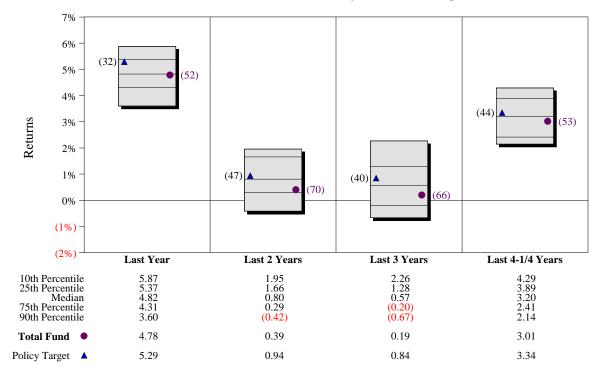
#### **Total Fund Ranking**

The first two charts show the ranking of the Total Fund's performance relative to that of the CAI Public Fund Sponsor Database for periods ended June 30, 2003. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

#### **CAI Public Fund Sponsor Database**



#### **Asset Allocation Adjusted Ranking**



<sup>\*</sup> Current Quarter Target = 40.0% L/B Agg, 25.0% S&P 500, 15.0% MSCI EAFE Index, 5.0% Russell 2000, 5.0% S&P Mid Cap 400, 5.0% Wilshire Real Estate Idx and 5.0% Post Venture Cap Idx.

#### TOTAL DOMESTIC EQUITY PERIOD ENDED JUNE 30, 2003

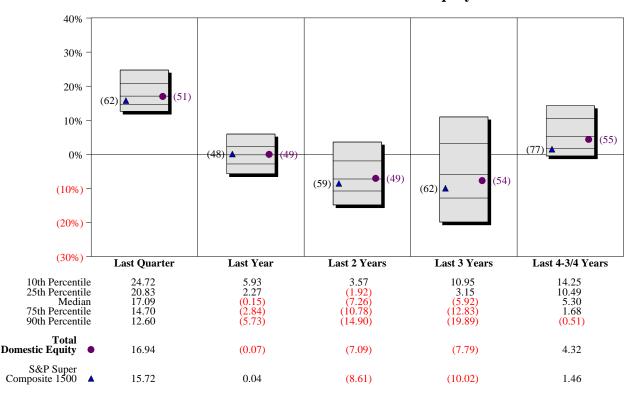
#### **Investment Philosophy**

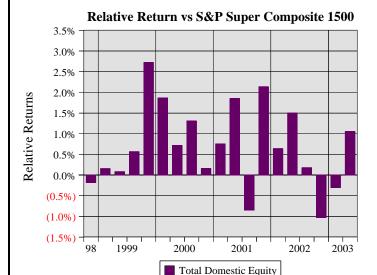
The Total Equity Database is a broad collection of actively managed separate account domestic equity products. Equity funds concentrate their investments in common stocks and convertible securities. Funds included maintain well-diversified portfolios.

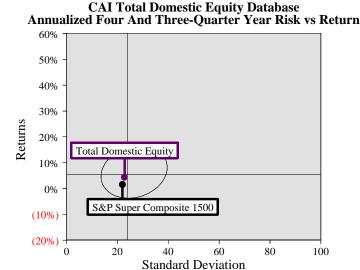
#### **Quarterly Summary and Highlights**

- Total Domestic Equity's portfolio posted a 16.94% return for the quarter placing it in the 51 percentile of the CAI Total Domestic Equity Database group for the quarter and in the 49 percentile for the last year.
- Total Domestic Equity's portfolio outperformed the S&P Super Composite 1500 by 1.22% for the quarter and underperformed the S&P Super Composite 1500 for the year by 0.11%.

#### Performance vs CAI Total Domestic Equity Database







#### TOTAL FIXED-INCOME PERIOD ENDED JUNE 30, 2003

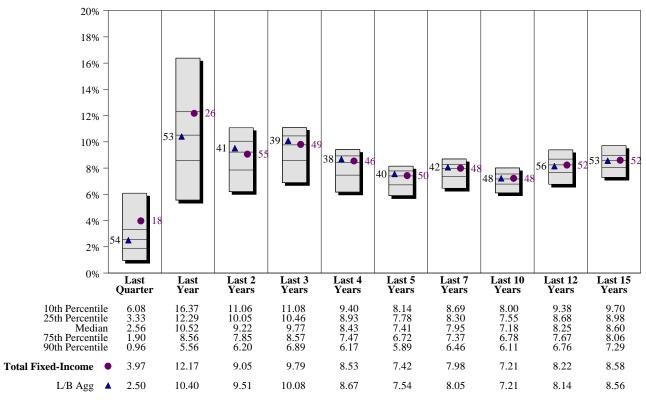
#### **Investment Philosophy**

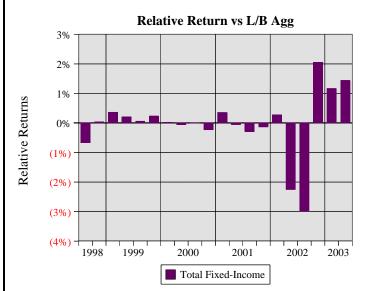
The Total Fixed-Income Database is a broad collection of separate account domestic fixed-income products. Fixed-Income funds concentrate their investments in bonds, preferred stocks, and money market securities.

#### **Quarterly Summary and Highlights**

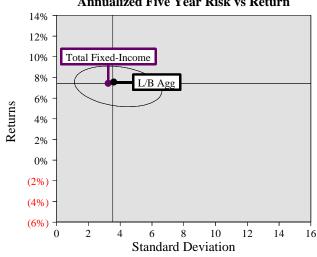
- Total Fixed-Income's portfolio posted a 3.97% return for the quarter placing it in the 18 percentile of the CAI Total Domestic Fixed-Inc Database group for the quarter and in the 26 percentile for the last year.
- Total Fixed-Income's portfolio outperformed the L/B Agg by 1.47% for the quarter and outperformed the L/B Agg for the year by 1.77%.

#### **Performance vs CAI Total Domestic Fixed-Inc Database**





#### CAI Total Domestic Fixed-Inc Database Annualized Five Year Risk vs Return



#### **Investment Manager Returns**

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2003. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the Fund's accounts for that asset class.

#### **Returns for Periods Ended June 30, 2003**

	Market Value \$(Dollars)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Last 4 Years	Last 6 Years
<b>Domestic Equity</b>	\$2,219,570,888	31.40%	16.94%	(0.07%)	(7.79%)	(2.64%)	•
Large Cap Equity	\$1,547,084,348	21.89%	15.28%	0.76%	(10.84%)	(6.74%)	-
Passive	\$1,029,688,481	14.57%	15.36%	0.34%	-	-	-
Barclays Global Investors	727,878,123	10.30%	15.36%	0.34%	(11.16%)	(6.88%)	3.11%
Rhumbline	301,810,358	4.27%	15.36%	0.33%	(10.85%)	(7.90%)	2.47%
Enhanced	\$297,187,870	4.20%	15.40%	2.26%	-	-	-
PIMCO	297,187,870	4.20%	15.40%	2.26%	(9.52%)	(5.54%)	4.25%
Standard & Poor's 500		-	15.39%	0.25%	(11.20%)	(6.91%)	3.08%
Growth	\$110,473,398	1.56%	13.94%	2.47%	_	_	_
Dresdner	33,731,284	0.48%	10.78%	1.53%	_	_	_
INTECH	41,518,045	0.59%	12.28%	6.34%	_	_	_
H-S&Y	35,224,069	0.50%	19.28%	(0.95%)	_	_	_
Russell 1000 Growth	55,224,007	0.5070	14.31%	2.94%	(21.54%)	(11.73%)	0.25%
S&P 500 Growth	_	-	12.17%	2.32%	(17.40%)	(9.59%)	2.43%
3&F 300 Glowth	-	-	12.1770	2.3270	(17.40%)	(9.39%)	2.43%
Value	\$109,734,599	1.55%	15.52%	(1.30%)	-	-	-
Earnest	21,358,291	0.30%	15.99%	3.30%	-	-	-
GEAM	30,917,559	0.44%	14.13%	(1.17%)	-	-	-
ICAP	25,936,820	0.37%	13.43%	(5.01%)	_	_	_
PFR	31,521,929	0.45%	18.42%	(1.27%)	_	_	_
Russell 1000 Value	-	-	17.27%	(1.02%)	(0.19%)	(2.45%)	5.23%
S&P 500 Value	-	-	18.84%	(1.84%)	(4.62%)	(4.74%)	3.10%
Mid Con Family	¢125 007 227	1.020/	17 100/	(F 100/)	(2.520/)	2.010/	
Mid Cap Equity	\$135,906,227	1.92%	17.19%	(5.10%)	(3.52%)	3.81%	10.120/
Franklin Portfolio Assoc.	84,604,439	1.20%	17.65%	0.67%	2.94%	7.00%	12.13%
Putnam Investments	51,301,788	0.73%	16.43%	(6.17%)	(11.39%)	(0.02%)	7.47%
S&P 400 Mid Cap	-	-	17.63%	(0.71%)	0.99%	4.77%	10.24%
Small Cap Equity	\$536,580,313	7.59%	21.95%	(0.76%)	(0.68%)	8.13%	-
Growth	\$202,932,398	2.87%	23.34%	(2.18%)	(22.17%)	_	_
Aeltus Capital Management	136,559,442	1.93%	21.64%	(2.85%)	(12.08%)	(0.50%)	2.67%
TCW Group	66,372,956	0.94%	26.98%	(0.27%)	(31.76%)	(13.28%)	(1.57%)
Russell 2000 Growth	-	-	24.15%	0.69%	(16.66%)	(7.15%)	(1.54%)
Value	\$333,647,915	4.72%	21.12%	(0.35%)	16.66%	_	_
Ariel Capital Management	187,463,607	2.65%	18.23%	1.12%	13.19%	9.45%	12.13%
Brandywine Asset Manageme		2.07%	25.05%	(0.83%)	20.59%	9.43%	12.1370
Russell 2000 Value	-	2.07%	22.72%	(3.80%)	10.93%	7.84%	7.33%
	<b>4.50</b>	<b>=</b> 400.					
International Equity	\$528,640,179	7.48%	18.58%	(8.23%)	(15.08%)	(6.30%)	-
Alliance Capital Management		2.60%	19.44%	(5.87%)	(13.11%)	(6.36%)	-
Bank of Ireland	179,260,313	2.54%	20.07%	(9.70%)	(13.07%)	(4.98%)	-
Dresdner RCM	165,599,746	2.34%	16.08%	(9.20%)	(19.33%)	(8.50%)	-
MSCI EAFE Index	-	-	19.27%	(6.46%)	(13.52%)	(6.70%)	(2.39%)
Alternative Investment	\$17,625,339	0.25%	11.04%	9.35%	_	-	-
Porfolio Advisors	17,625,339	0.25%	11.04%	9.35%	_	_	_
Post Venture Cap Index		-	34.85%	19.79%	(29.83%)	(16.55%)	(1.15%)
1 ost 7 chaire cap macx			3 1.03 /0	17.17/0	(27.05/0)	(10.5570)	(1.15/0)

Indiana State Teachers' Retirement Fund

#### **Investment Manager Returns**

The table below details the rates of return for the Sponsor's investment managers over various time periods ended June 30, 2003. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

#### **Returns for Periods Ended June 30, 2003**

	Market				Last	Last	Last
	Value \$(Dollars)	Ending Weight	Last Quarter	Last Year	2 Years	3 Years	4 Years
		_					
Domestic Fixed-Income	\$3,324,941,925	54.59%	3.97%	12.17%	9.05%	9.79%	8.53%
Alliance Capital Mgmt.	1,590,212,385	26.11%	3.81%	13.60%	10.18%	10.70%	9.02%
Alliance Capital Index	-	-	2.50%	10.40%	9.51%	10.07%	8.67%
Reams Asset Management	1,564,713,830	25.69%	4.25%	11.20%	7.47%	9.03%	8.45%
Taplin, Canida & Habacht	68,251,508	1.12%	4.91%	14.50%	11.13%	10.65%	8.49%
Lehman Brothers Agg.	-	-	2.50%	10.40%	9.51%	10.08%	8.67%
Cash Flow Account	101,764,202	1.67%	0.70%	2.73%	2.45%	3.51%	3.76%
Treasury Bills	-	-	0.34%	1.53%	2.08%	3.33%	3.88%
Composite Fund	\$6,090,778,331	100.00%	9.60%	6.17%	1.69%	1.40%	3.50%
Standard & Poor's 500	_	_	15.39%	0.25%	(9.33%)	(11.20%)	(6.91%)
Domestic Equity Database	-	-	18.04%	0.43%	(6.39%)	(5.77%)	(0.58%)
					N	N /	N
Domestic Fixed Database	-	-	3.05%	10.75%	8.86%	9.23%	8.00%

Indiana State Teachers' Retirement Fund

# **Defined Benefit Investment Cost Effectiveness Analysis**

(for the 5 years ending December 31, 2002)

Indiana State Teachers' Retirement Fund

Prepared September 5, 2003 by:



COST EFFECTIVENESS MEASUREMENT INC.

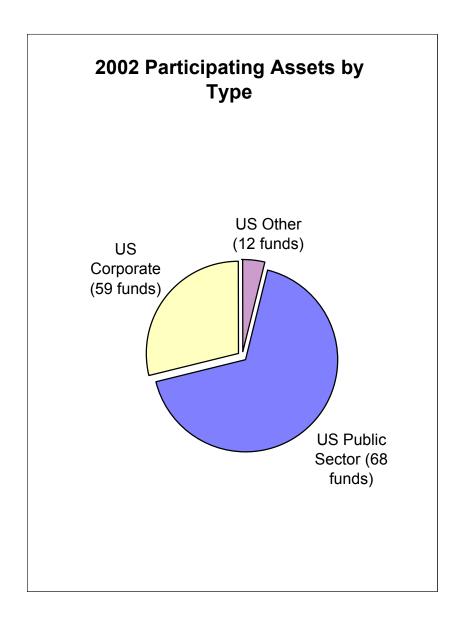
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www.costeffectiveness.com

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# Comparisons are to CEM's extensive pension performance database.

- 139 US pension funds participate. They represent 30% of U.S. defined benefit assets. The median US fund had assets of \$3.4 billion, while the average US fund had assets of \$7.0 billion. Total participating US assets were \$1.4 trillion.
- 88 Canadian pension funds participate. They represent 70% of Canadian defined benefit assets. The median Canadian fund had assets of \$0.9 billion, while the average Canadian fund had assets of \$4.2 billion. Total participating Canadian assets were \$0.4 trillion.
- The most meaningful comparisons for your returns and value added performance are to the US universe.



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# What gets measured gets managed, so it is critical that you measure and compare the right things:

1. Surplus Return

Is the market value of your assets growing faster than the market value of your liabilities?

2. Policy Value Added

Are your policy asset mix decisions adding value?

3. Implementation Value Added

Are your implementation decisions (i.e., mostly active management) adding value?

4. Costs

Are your costs reasonable?

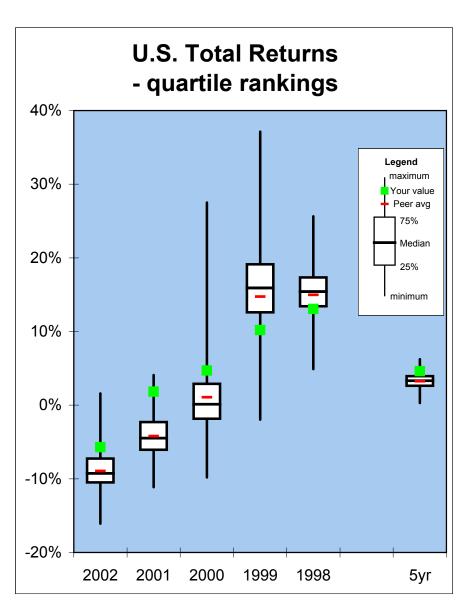
Costs matter and can be managed.

5. Surplus Risk

Risk is caused by the mismatch between your assets and your liabilities. How big is the risk? Are you being paid sufficiently for the risk you are taking?

# Total Returns, by themselves, are the wrong thing to compare and focus on.

They do not tell you the reasons behind good or bad relative performance.



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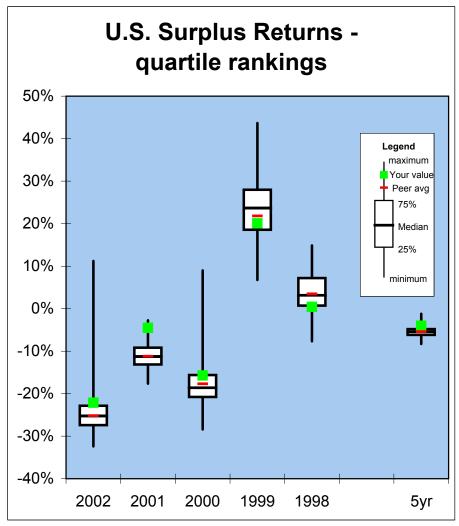
#### 1. Surplus Return

A better measure of total performance is Surplus Return. It compares your Total Return to the change in your liabilities caused by market forces. Your 5-yr Surplus Return was -4.0%.

This compares to a peer median of -5.5% and a US median of -5.4%.

Your 5-yr surplus return was negative. Therefore, the market value of your liabilities grew faster than the market value of your assets.

Calculation of Your 5-yr Surplus Return			
	<u>5-year</u>		
+ Total Return	4.6%		
- Change in Liabilities caused by			
market factors ("Liability Return")	8.5%		
- Costs	0.2%		
= Surplus Return	-4.0%		



1. Surplus Return (Neutral Asset Mix)

#### To measure changes in your liabilities caused by market factors (your "Liability Return"), we start by constructing a neutral asset mix that matches your pension liability profile.

Your Neutral Asset Mix				
Modified % o				
Dι	Duration			
Inflation Indexed Bonds	10.0	64%		
Nominal Bonds	25.5	36%		
Total		100%		

There are two very good reasons why funds do not guarantee their pension liabilities by purchasing their neutral asset mix:

- impractical for large funds due to the limited supply of inflation indexed assets.
- higher funding costs or lower future benefits because this low risk strategy also has a lower expected return.

Your asset mix is constructed using a combination of nominal and inflation indexed bonds. It takes into account the sensitivity of your pension liabilities to changes in real and nominal interest rates. Your neutral asset mix reflects:

- Your plan type. You have a 5 year highest average plan. Therefore, your active employees have essentially close to 100% inflation protection.
- Your pension promise in terms of post-retirement inflation protection. Your contractual inflation protection for retirees was 0%.
- The proportion of your membership that is active, deferred and retired. Older plans with more retirees have shorter durations than younger plans with more active members.

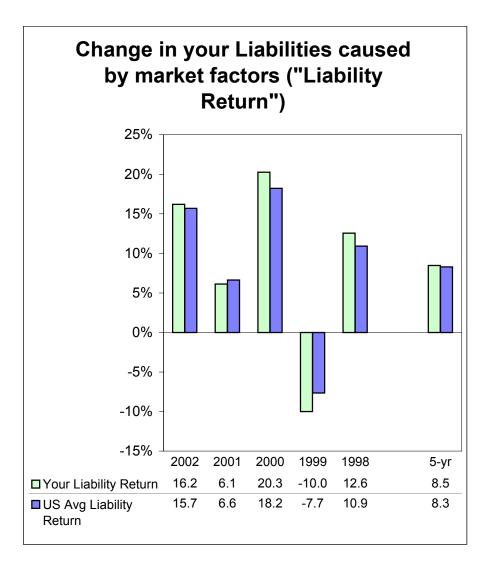
1. Surplus Returns (Liability Returns)

## Market factors caused your liabilities to increase by 8.5% per annum over the past 5 years, which was close to the US average liability return of 8.3%.

- Your liability return's performance relative to the US average depends on:
- the relative sensitivity of your liabilities to changes in nominal and real interest rates compared to the US average,
- how these interest rates have changed over the past 5 years.

For example, Final Average plans with 100% inflation protection for retirees are impacted more significantly by changing real than nominal interest rates.

• Liability Returns do not reflect changes in your Liabilities caused by changes in benefits or demographics just as Asset Returns do not measure changes in assets caused by contributions. Liability Returns only measure changes caused by market forces.



2. Policy Value
Added - How does
your current Policy
Asset Mix compare?

## You changed your asset mix in 2002. Currently, it compares to your peers and the US average as follows:

Most significantly, you reduced your Fixed Income policy weight (from 48% to 40%), added a new policy weight for Private Equity (5%) and increased your policy weight in Foreign Stocks (from 10% to 15%).

2002 Policy Asset Mix			
	Your	Peer	US
Asset Class	Fund	Avg	Avg
Domestic Stocks	35%	45%	45%
Foreign Stocks	15%	16%	16%
Fixed Income	40%	33%	30%
Inflation indexed bonds	0%	1%	1%
Cash	0%	0%	1%
Real Estate & REITS	5%	1%	4%
Private Equity	5%	3%	3%
Total	100%	100%	100%

### Your 5-year policy return of 4.0% was above the US median of 2.6%.

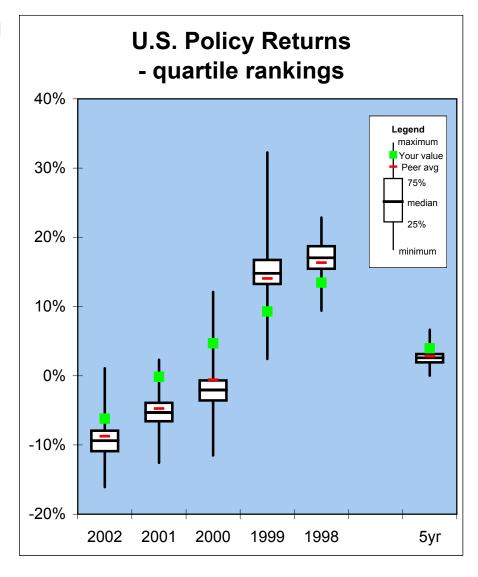
Your policy return is the return you could have earned passively by indexing your investments according to your investment policy asset mix.

Having a higher or lower relative policy return is not necessarily good or bad. This is because your policy return reflects your investment policy which should reflect your:

- long term capital market expectations
- liabilities
- appetite for risk.

Each of these three factors is different across funds. Therefore, it is not surprising that policy returns vary significantly between funds.

Note: your peer median 5-yr policy return was 2.6%.



2. Policy Value Added Why does your Policy Return differ from average?

# Your above US median 5-yr policy return reflects the following differences between your policy asset mix and the US average.

- The positive impact of your relative overweighting in one of the best performing asset classes of the past 5 years: Fixed Income (your 5-yr avg weight of 46% versus a US average of 31%).
- The positive impact of your relative underweighting in one of the worst performing asset classes of the past 5 years: Domestic Stocks (your 5-yr avg weight of 36% versus a US average of 46%).
- The positive impact of your relative underweighting in one of the worst performing asset classes of the past 5 years: Foreign Stocks (your 5-yr avg weight of 11% versus a US average of 14%).

5-year Average Policy Asset Mix					
	Your	Peer	US		
Asset Class	Fund	Avg	Avg		
Domestic Stocks	36%	46%	46%		
Foreign Stocks	11%	15%	15%		
Fixed Income	46%	35%	31%		
Inflation indexed bonds	0%	0%	0%		
Cash	0%	0%	1%		
Real Estate & REITS	6%	1%	4%		
Private Equity	1%	2%	3%		
Total	100%	100%	100%		

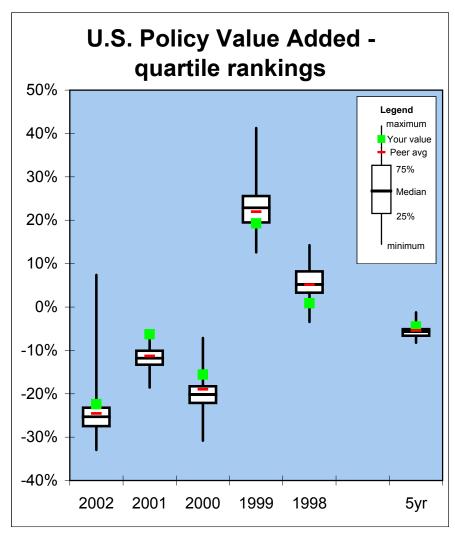
#### 2. Policy Value Added

Policy value added is the value added from policy asset mix decisions. It equals your policy return minus the return on your neutral liability matching portfolio (i.e. your liability return).

• Your 5-yr average policy value added was -4.5% per annum. In other words, your policy asset mix decision resulted in the market value of your liabilities growing faster than your assets by 4.5% per annum.

Calculation of your 5-yr Policy Value Added		
	5-year	
+ Policy Return	4.0%	
- Change in Liabilities caused by		
market factors ("Liability Return")	8.5%	
= Policy Value Added	-4.5%	

Your 5-year Policy Value Added of -4.5% was above the US median of -5.7% per annum. Your peer median was -5.6% per annum.

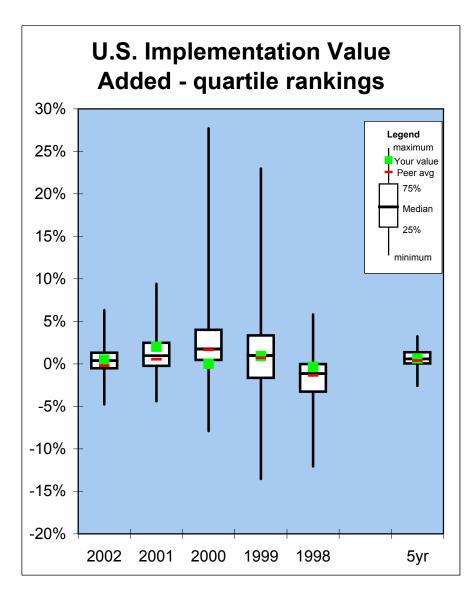


## Implementation value added measures the contribution from active management. Your 5-yr implementation value added was 0.6%.

- This compares to a 5-yr US median of 0.6% and a peer median of 0.6%.
- Your value added from implementation decisions (i.e., mostly active management) equals your total return minus your policy return (i.e., the return you could have earned by passively indexing your policy asset mix).

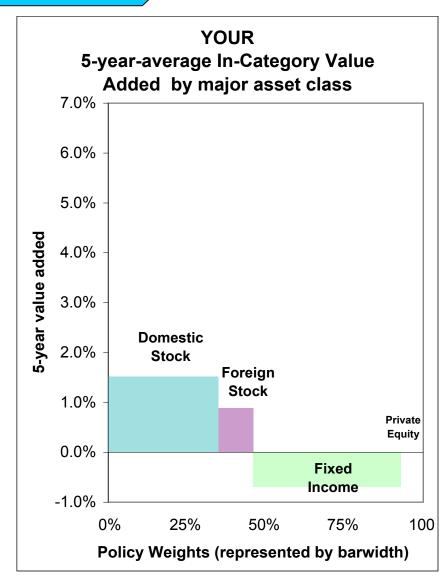
	Actual	Policy	Value Added			
Year	Return	Return	Total	In-Category	Mix	
2002	-5.7%	-6.2%	0.5%	-1.6%	2.1%	
2001	1.8%	-0.2%	2.0%	0.6%	1.4%	
2000	4.7%	4.7%	0.0%	-0.3%	0.3%	
1999	10.2%	9.3%	0.9%	3.2%	-2.3%	
1998	13.1%	13.4%	-0.4%	-0.2%	-0.1%	
5yr	4.6%	4.0%	0.6%	0.3%	0.3%	

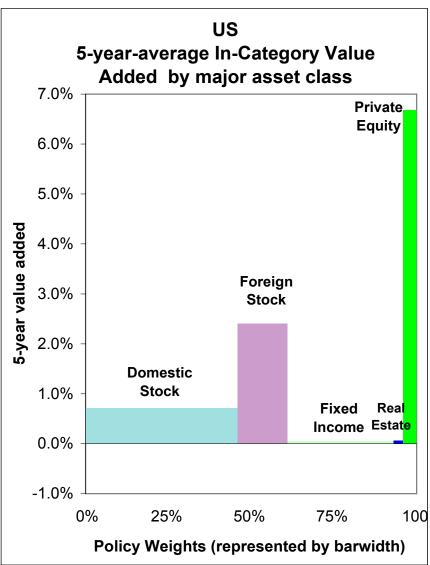
• Your 5-yr Implementation Value added of 0.6% consisted of 0.3% from In-Category (security selection) and 0.3% from Mix (primarily differences between your actual and policy asset mixes).



3.Implementation
Value Added
(In-category by Asset
Class)

### You had positive 5-year in-category value added in Domestic and Foreign Stocks.







## Asset mix and implementation decisions impact costs. Your asset management costs (including G&A) in 2002 were \$12.8 million or 22.6 basis points.

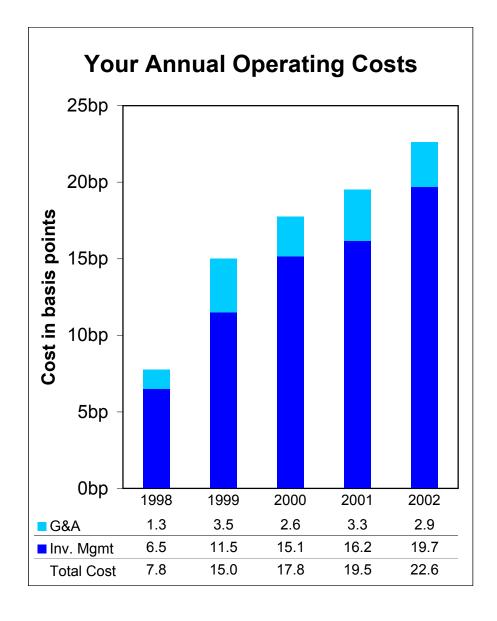
- CEM collects direct investment costs by major asset classes and 4 different implementation styles.
- Governance and administration includes all costs associated with the oversight and administration of the investment operation, regardless of how these costs are paid.
- Note that only asset management and oversight costs are included. Costs pertaining to member servicing are specifically excluded.

Your Direct Investment Mana	gement (	Costs (	\$000s)		
	Inter	nal	Exte	rnal	
	Passive	Active	Passive	Active	Total
Domestic Equity - Large Cap			262	1,824	2,086
Domestic Equity - Small Cap				4,196	4,196
Foreign Equity - Developed			142	1,680	1,822
Foreign Equity - Emerging					
Fixed Income - Domestic				2,896	2,896
Fixed Income - Foreign					
Fixed Income - Inflation Indexed					
Fixed Income - Miscellaneous					
Cash & Equivalents					
REITs					
Real Estate					
Hedge & Absolute return					
			Fund-	of-Fund	
Venture Capital & LBO				160	160
Other Private Equity					
Overlay Programs					
Total DIM costs				19.7bp	11,160
Your Governance & Adminis	tration - a	asset re	lated (\$0	00s)	
Executive and Admin					150
Custodial					1,140
Consulting and Performance Mea	surement				290
Audit					
Other					75
Total G&A costs				2.9bp	1,655
<b>Total Operating Costs in \$00</b>	0s			22.6bp	12,815

### Your operating costs have increased each year for the past 5 years.

This increase is not surprising given that you have changed your asset mix over the past 5 years.

- For each of the the 4 years ending 2001, you decreased your allocation to 'lower cost' Fixed Income and increased your allocation to 'higher cost' Domestic and Foreign stocks.
- The increase in costs in 2002 can be partially attributed to a new private equity program initiated during the year. Private equity is one of the highest cost asset classes.



### 4. Costs- Are they high or low?

### Benchmark cost analysis suggests that your fund was normal cost.

To assess your cost performance, we start by calculating your benchmark cost. Your benchmark cost is an estimate of what your costs should be given your fund size, asset mix and country of origin.

Your Actual Cost of 22.6 bp was close to your Benchmark Cost of 19.8 bp. Thus, your fund's Excess Cost was 2.8 bp, suggesting that your fund was normal cost.

The following pages review reasons behind your normal cost status.

	(\$000)	basis points
Your Fund's Actual Cost	\$12,815	22.6 bp
Your Fund's Benchmark Cost*	<u>\$11,213</u>	<u>19.8 bp</u>
Your Fund's Excess Cost	\$1,602	2.8 bp

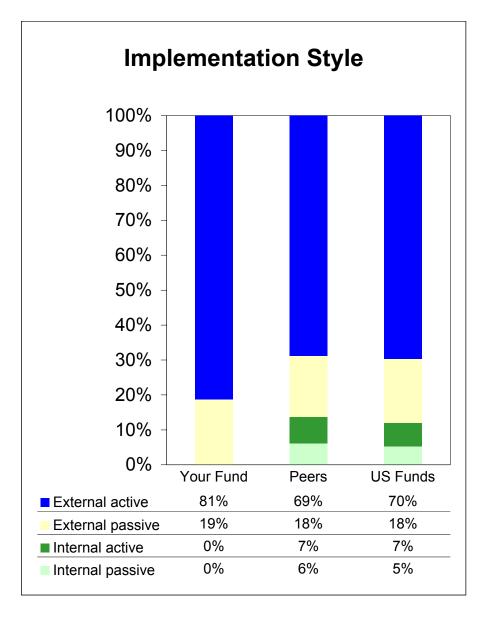
*Calculating the 2002 Benchmark Cost for						
Indiana State Teachers' F	Indiana State Teachers' Retirement Fund					
	Values X					
Characteristics	Values	Coeff.	Coefficients			
Constant or starting point estimate		73.7	74 bp			
Adjusting Factors:						
Size (Log10 of Your avg size of \$5664 mil	3.75	-17.6	-66 bp			
Percentage of assets invested in:						
- Domestic Equity	36%	17.5	6 bp			
- Foreign Equity	9%	60.5	6 bp			
- Real Estate	0%	102.0	0 bp			
- Venture Capital/LBO/Private Equity	0%	163.1	0 bp			
Country Variable (1 if Cdn, 0 if US)	0	-12.6	0 bp			
Total = Your Benchmark Cost			19.8 bp			



### Your implementation style was slightly high cost.

• Your fund used more external active management than your peers (your 81% versus a 69% average for your peers).

External active management is usually substantially higher cost than either passive management or internal management so small differences in the proportions of this high cost style can have a large impact on relative cost performance. However, in your case, the difference is minor because more than two-thirds of your external active management is in fixed income (one of the least costly asset classes).



4. Costs Are you paying
more for similar
services?

### Your Governance & Administration costs were very similar to your peers.

Governance & Administrative Costs  Your 2002 Peer Impact of to						
	Your 20	02	Peer	Impact of the		
	Avg Holdings	Costs	Median	difference		
	in \$mils	in bps	in bps	in \$000's		
Executive & Administrative	5,664	0.3	8.0	-310		
Custodial	5,664	2.0	1.4	354		
Consulting & Performance Measurement	5,664	0.5	0.4	45		
Other G&A	5,664	0.13	0.14	-5		
Total G&A Impact in \$000's				\$83		
Total G&A Impact in basis points				0.1 bp		

4. Costs Are you paying more for similar services?

# Your External Investment Management costs were generally close to your peers. The notable exception was your much lower Active Fixed Income costs.

Externally Managed Investment Management Costs					
	Your 20	02	Peer	Impact of the	
	Avg Holdings	Costs	Median	difference	
	in \$mils	in bps	in bps	in \$000's	
Domestic Stock Large Cap - Passive	928	2.8	2.0	76	
Domestic Stock Large Cap - Active	498	36.6	36.6	0	
Domestic Stock Small Cap - Active	608	69.0	66.3	166	
Foreign Stock Developed - Passive	179	7.9	8.7	-14	
Foreign Stock Developed - Active	358	46.9	41.9	178	
Domestic Fixed Income - Active	3,088	9.4	17.4	-2,465	
Ven. Capital/ LBO - Fd of Fd (Amt fees pd o	5	355.6	80.6	124	
Total External Investment Management Impact in \$000's					
Total External Investment Management Impact in basis points				-3.4 bp	

4. Costs Detailed
Comparison &
Summary

### Differences between what you and your peers paid for similar services amounted to about -3 bp.

 The chart on the right summarizes comparisons of your costs to your peers.

Summary of Impact -		basis
Your Costs vs. Peers	\$'000s	points
Governance & Administration	83	0.1 bp
External Investment Management	-1,936	-3.4 bp
Total Impact	-\$1,853	-3.3 bp

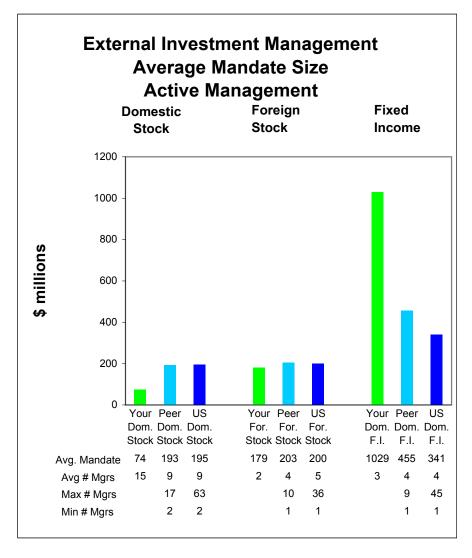
#### **Summary of Overall Cost Analysis**

- Benchmark Cost analysis suggested that your fund was normal cost.
- Further analysis confirmed that your fund was normal cost because your slightly high cost implementation style was offset by the fact that you paid less than your peers for some services.

4. Costs Do you have smaller mandates?

## Your much larger mandates for fixed income could be one reason why your are paying much less than your peers for this asset class.

 Declining asset based fee schedules help funds that give external managers larger portfolios to sometimes achieve better cost performance. The impact is usually subtle.



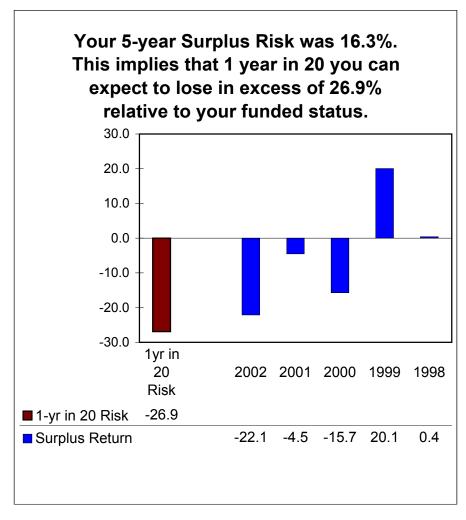
5. Surplus Risk

# Risk is created by the mismatch between your assets and your liabilities. This mismatch is caused by both asset mix policy decisions and implementation decisions.

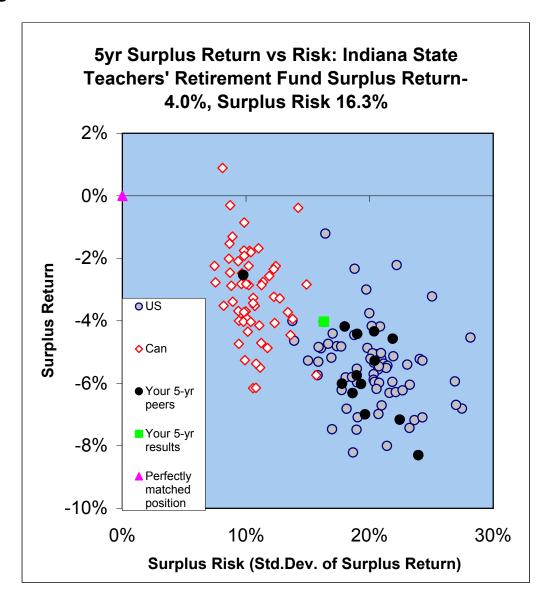
CEM defines "Surplus Risk" as the standard deviation of your Surplus Return. Your Surplus Risk for the 5-years ending 2002 was 16.3%.

By applying further statistical analysis, your Surplus Risk can be used to estimate the magnitude of potential losses in 'worst case' scenarios.

In your case, this analysis implies that 1 year in 20 you can expect to lose in excess of 1.65 X 16.3% = 26.9% relative to your current funded status. Of course, 1 year in 20 you can also expect to gain in excess of the same amount.



#### Most systems have not been rewarded for taking risk over the past 5 years.



#### In summary:

1. Surplus Return

2. Policy Return

3. Implementation Value Added

4. Costs

5. Surplus Risk

Your relative performance

Your liabilities grew faster than your assets. Your 5-yr Surplus Return was -4.0% per annum. This overall performance reflects:

- Negative value added from asset mix policy decisions. Your 5-yr policy value added was -4.5% per annum.
- Positive value added from implementation decisions (i.e., mostly active management). Your 5-yr implementation value added was 0.6% per annum.
- Relative normal cost. Your 2002 cost of 23 bps was in line with your benchmark cost primarily because your slightly high cost implementation style was offset by the fact that you paid less than your peers for some services.

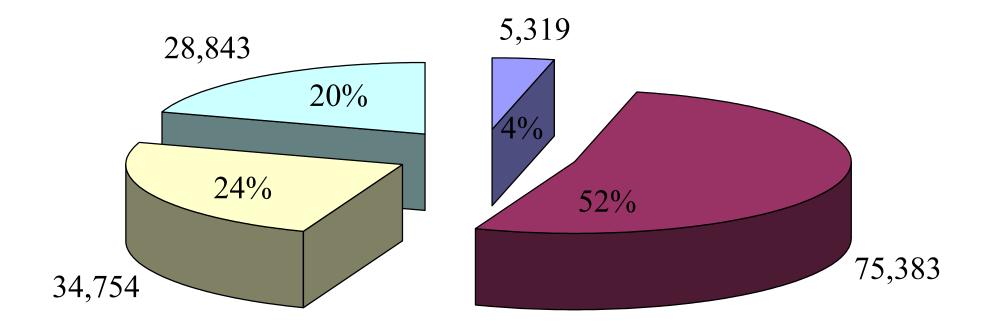
Your Surplus Risk was 16.3%. This risk implies that 1 year in 20 you can expect to lose more than 26.9% relative to your funded status.

Your 5-year Performance		Relative Comparisons	
		Peer	US
		Med	Med
+ Policy Value Added	-4.5%	-5.6%	-5.7%
+ Implementation Value Added	0.6%	0.6%	0.6%
- Costs	<u>-0.2%</u>	<u>-0.3%</u>	<u>-0.3%</u>
= Surplus Return	<u>-4.0%</u>	<u>*-5.5%</u>	<u>*-5.4%</u>
Surplus Risk	16.3%	19.2%	20.3%

<sup>\*</sup>Note: The numbers do not add because we have used medians and not averages. We used medians because they provide better relative comparisons.

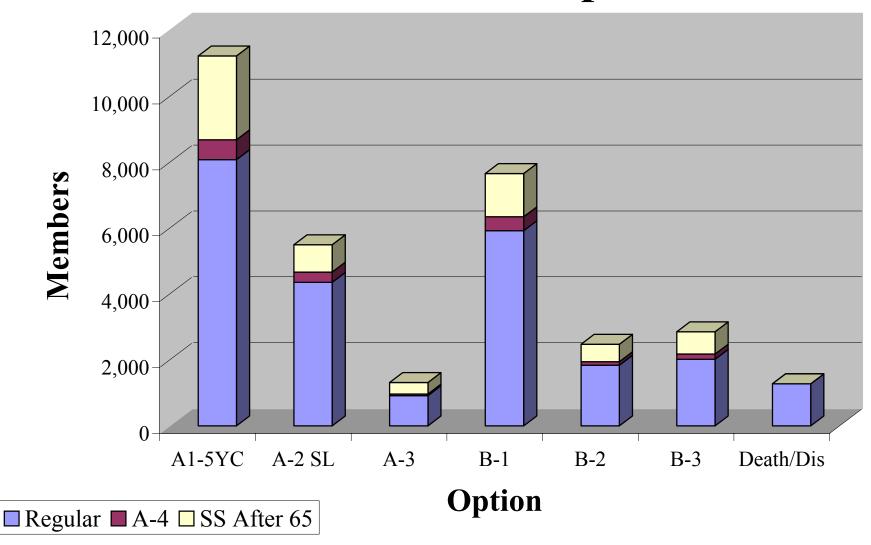


#### **FUND MEMBERS**

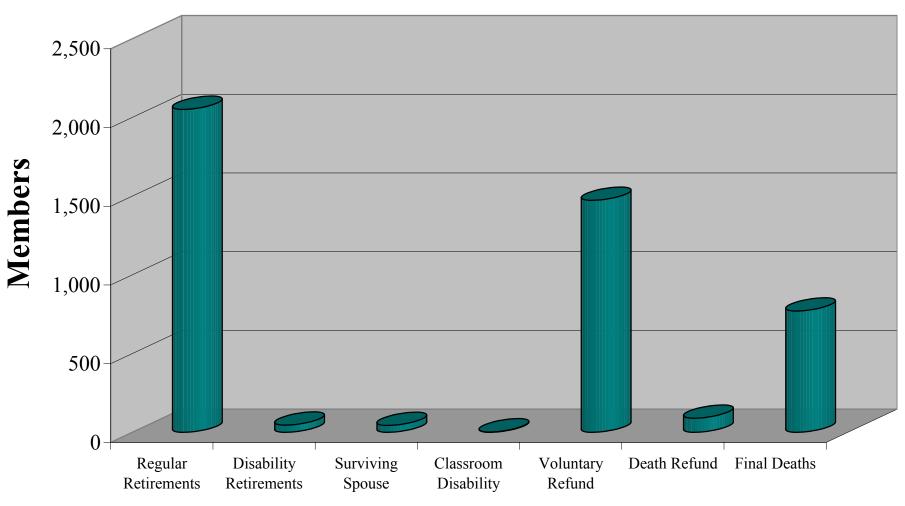


☐ Inactive ☐ Active ☐ Retirees ☐ Non-vested Inactive

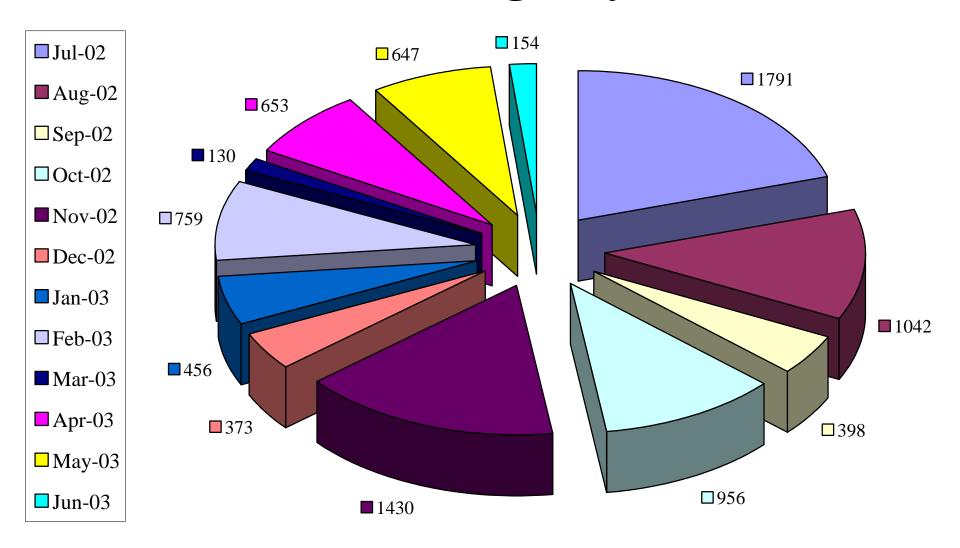
#### **Retired Member Options**



#### Distributions Fiscal Year 2002-2003



#### **Allocation Changes by Month**



### CLOSED PLAN RETIRED MEMBERS AND BENEFICIARIES JUNE 30, 2002 TABULATED BY YEAR OF RETIREMENT

Year of		Monthly Pensions		
Retirement	No.	Total	Average	
Before 1950	22	\$14,273	\$4,016	
1950-1959	87	48,283	5,082	
1960	27	11,739	435	
1961	36	15,317	426	
1962	40	14,005	350	
1963	38	13,789	363	
1964	66	26,057	395	
1965	60	21,072	351	
1966	79	30,445	385	
1967	94	36,745	391	
1968	127	53,496	421	
1969	165	75,543	458	
1970	213	104,540	491	
1971	285	144,307	506	
1972	336	181,764	541	
1973	452	262,786	581	
1974	454	250,265	551	
1975	438	245,845	561	
1976	487	277,588	570	
1977	561	336,814	600	
1978	597	360,638	604	
1979	665	403,568	607	
1980	721	431,498	599	
1981	717	437,576	610	
1982	697	431,164	619	
1983	761	466,552	613	
1984	813	509,573	627	
1985	1,159	773,670	668	
1986	916	628,896	687	
1987	1,065	775,445	728	
1988	1,159	898,178	775	
1989	917	741,759	809	
1990	1,404	1,275,538	909	
1991	1,346	1,313,573	976	
1992	1,204	1,218,397	1,012	
1993	1,257	1,368,433	1,089	
1994	1,390	1,544,107	1,111	
1995	1,719	1,987,746	1,151	
1996	1,697	2,068,117	1,219	
1997	1,477	1,833,222	1,241	
1998	1,847	2,402,749	1,301	
1999	1,677	2,335,814	1,393	
2000	1,954	2,847,336	1,457	
2001	1,980	3,102,376	1,567	
2002	1,440	2,301,747	1,598	
TOTALS	34,646	\$34,613,345	\$999	

### NEW PLAN RETIRED MEMBERS AND BENEFICIARIES JUNE 30,2002 TABULATED BY YEAR OF RETIREMENT

Year of		Monthly Pensions		
Retirement	No.	Total	Average	
1996	3	\$1,558	\$519	
1997	3	1,526	509	
1998	12	7,513	626	
1999	16	17,392	1,087	
2000	34	35,696	1,050	
2001	20	25,559	1,278	
2002	20	35,951	1,798	
Totals	108	\$125,194	\$1,159	

### INCOMING CALL ANALYSIS REPORT Fiscal Year Ending June 30, 2003

Calls Received by Member Services Center	56,207
Night Calls on Voice Mail	7,713
Average Speed of Answer (in seconds)	18
Incoming Calls Reaching Busy Tone	0%
Average Length of Conversation (in seconds)	157



#### **Benefit Administration Benchmarking Analysis**

March 18, 2003

#### Indiana State Teachers Retirement Fund

Prepared March 18, 2003 by:



350 Bay St., Suite 800, Toronto, ON M5H 2S6 Tel: 416-369-0568 Fax: 416-369-0879 www.costeffectiveness.com

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### The following 63 leading pension systems participate in CEM's Benefit Administration Benchmarking Service.

**United States** 

Alaska Arizona

CalPERS CalSTRS

Colorado PERA

Idaho PERS

Illinois MRF

Illinois TRS Indiana PERF

**Indiana STRF** 

Iowa PERS

Kansas PERS

Los Angeles County ERA

Louisiana State ERS

Maryland

Massachusetts Teachers'

Michigan MERS Michigan ORS

Missouri State ERS

New Jersey DP&B

New York City Teachers'

New York State & Local

North Carolina

Ohio PERS

Ohio Police & Fire

STRS Ohio Oregon PERS

Pennsylvania PSERS

Ohio SERS

South Carolina

Texas MRS Texas ERS

Virginia

Washington State DRS

Wisconsin

<u>Canada</u>

CIBC

Defense Canada

Local Authorities Pension Plan

Ontario Municipal ERS

**OP Trust** 

Ontario Teachers' Pension Plan

Nova Scotia

Public Works & Gov't Service

<u>Australia</u>

Australia Post ComSuper

**GESB Western Australia** 

**GSO Victoria** 

Pillar Administration

QSuper

**RBF** Tasmania

Telstra UniSuper

The Netherlands (excluded

from this analysis)

ABP PABS Atos Origin

**Bpf Bouw** 

BPF Schilders

**Bpf Textiel** 

BPMT/ MN Services

IBM PGGM

PMI

Relan Pensioen

Shell Pensioenfonds

The most relevant comparisons are to systems that are similar to you. Thus, your peer group is comprised of 16 U.S. participants closest to you in size.

Peer group for Indiana State TRF			
	<u>Actives</u>	<u>Annuitants</u>	<u>Total</u>
Alaska	45	26	71
ERS of Texas	151	51	202
Idaho PERS	62	24	86
Illinois MRF	165	71	236
Illinois TRS	156	68	224
Indiana State TRF	110	35	144
Iowa PERS	159	72	231
KPERS	154	56	210
LACERA	89	46	135
LASERS	65	34	99
Massachusetts TRS	89	35	124
Michigan MERS	37	17	54
MOSERS	59	22	81
Ohio P&F	26	23	49
Ohio SERS	120	66	186
STRS Ohio	206	121	327
Texas MRS	88	20	108
Average	105	46	151

### The focus of the analysis is on understanding and quantifying how the following 7 factors drive costs.

## What you do for your members?

### 1. Activities Performed

(e.g., Paying Pensions, Providing Estimates, etc.)

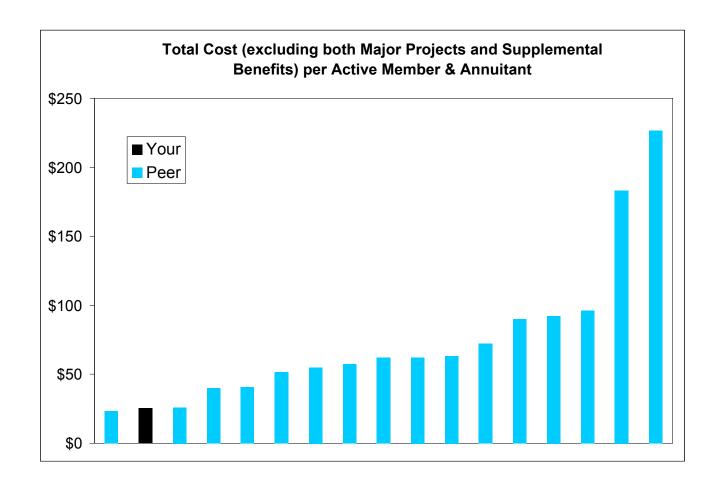
- 2. Service Levels
- 3. Quality
- a. Best Practice reviews
- b. Customer Satisfaction
- c. Accuracy

## What are your constraints?

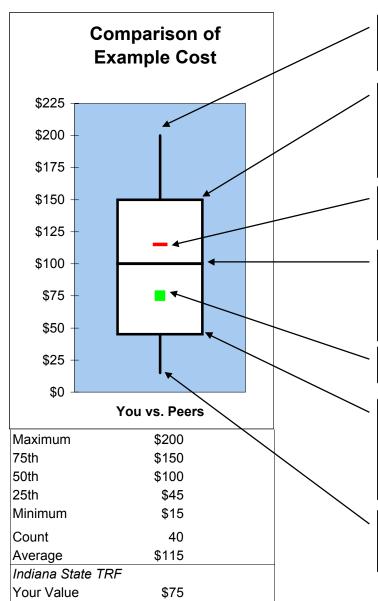
- 4. Plan Complexity
- 5. Volumes
- a. Economies of scale
- b. Relative Workloads
- 6. Cost Environment
- 7. Systems



### Your Total Cost of \$25 per active member and annuitant is the second lowest of your peers. The peer median cost is \$62.



#### Our analysis frequently uses box and whisker graphs to summarize data, beginning on the following page. This is how to interpret the graphs.



**Maximum.** The top of the whisker represents the system with the maximum cost among the 40 peers. In this example the maximum is \$200.

**75th percentile/ 3rd quartile/ three-quarter point.** The top of the box represents the 75th percentile. In this example the 75th percentile is \$150. Thus three-quarters of the peers (or 30 of 40 in this example) have a cost below \$150 and one-quarter of the peers have a cost above \$150.

**Average.** The red bar represents the average cost of the 40 peers. In this example the average is \$115.

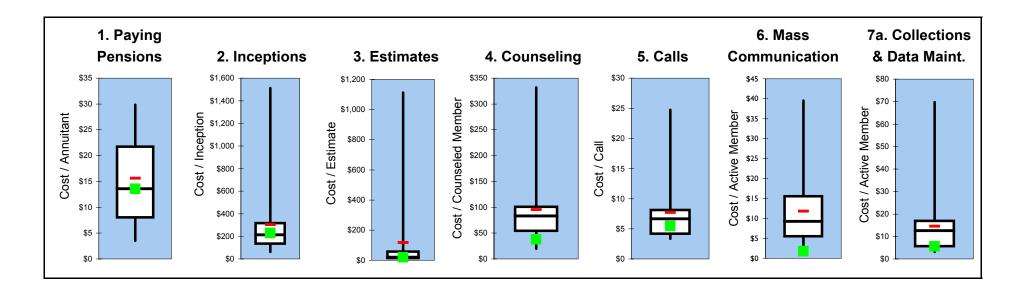
**50th percentile/ median/ midpoint/ half-way point.** The line through the center of the box represents the middle observation. In this example the midpoint is \$100. Thus 1/2 of the peers (or 20 of 40 in this example) have a cost below \$100 and the other 1/2 of the peers have a cost above \$100.

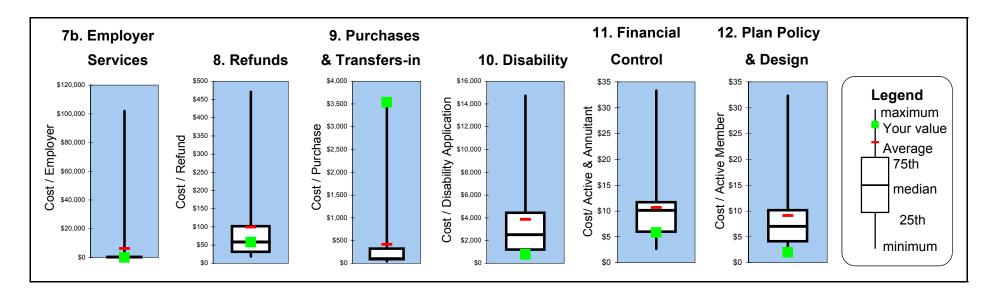
**Your Cost.** The green box represents your cost. In this example: \$75.

**25th percentile/ 1st quartile/ one-quarter point.** The bottom of the box represents the 25th percentile. In this example the 25th percentile is \$45. Thus one-quarter of the peers (or 10 of 40 in this example) have a cost below \$45 and three-quarters of the peers have a cost above \$45.

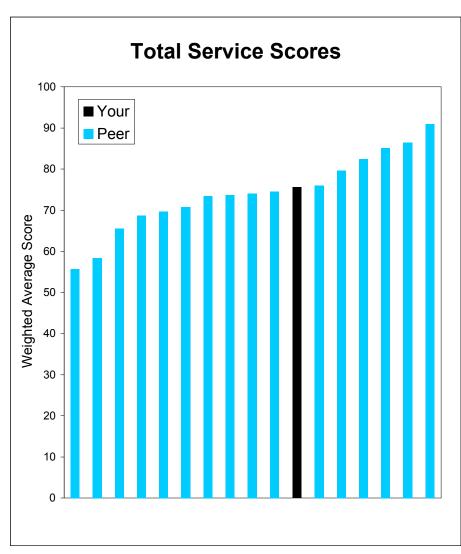
**Minimum.** The bottom of the whisker represents the system with the minimum cost among the 40 peers. In this example the minimum is \$15.

#### Your Unit Costs by Activity compare to your peers as follows:





### Your Total Service Score is 76 out of 100. This is above your revised\* score from last year of 67.



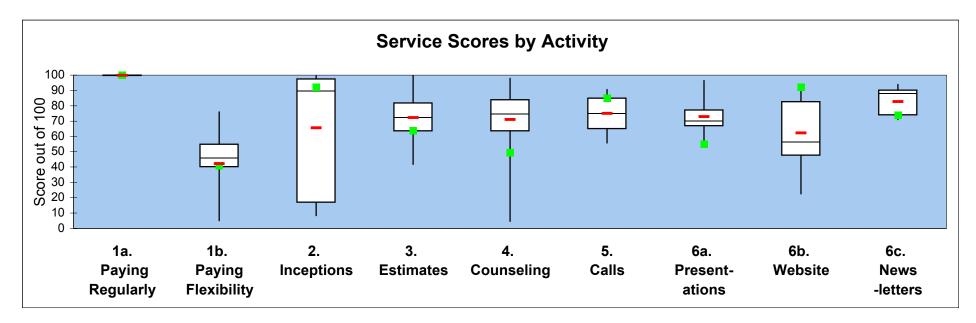
<sup>\*</sup> Your Service Score from last year was revised to reflect additional service factors and slightly changed weightings.

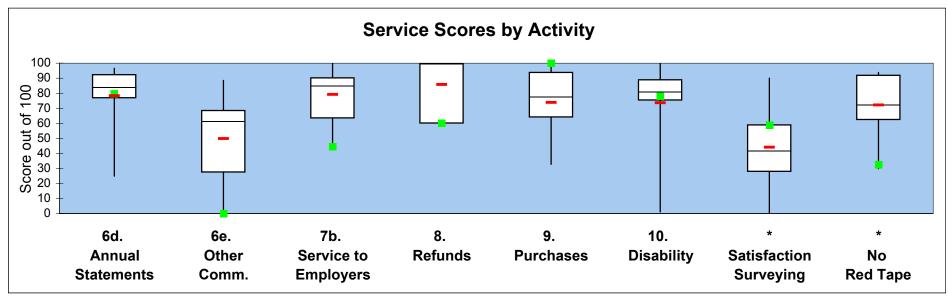
Your Total Service Score is the weighted average of your Service Scores for each Activity. Comparisons of your Service Scores for each Activity and a discussion of what you would have to do to improve your Score are shown on the following two pages.

Your relative rank is not nearly as important as understanding why you rank where you do. This is because:

- Service is defined as: "Anything a member would like, before considering costs." Because this definition ignores costs, high service is not always cost effective or optimal. For example, it is higher service to have a call center open 24 hours a day but no system can justify the expense.
- The weights used to determine the scores will not always match the relative importance your members attach to the criteria.

#### Your Service Scores by Activity compare to your peers as follows:





#### It is not always cost effective to have a high Service Score.

Congratulations on your Service improvement this year. You could add a further 8 points (from 76 to 83) to your Total Service Score if you improved your performance in the following 2 activities:

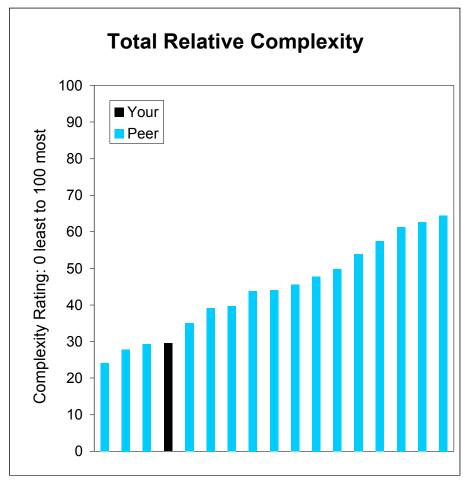
#### Counseling (+5.2 points)

- You do not offer any counseling in the field, whereas 65% of your peers do.
- You have limits on your pre-scheduled 1-on-1 inhouse counseling. For example, you require that members be within a certain time period of earliest possible retirement before requesting counseling 94% of your peers do not.
- Your members typically wait 20 days until they can meet with a counselor after requesting a pre-scheduled counseling session, versus a peer median of 5 days.

#### Calls (+2.7 points)

- You have less system capability than your peers. For example, when a member calls in, your service reps do not have online access to (i) records of the member's previous calls to the system (35% of your peers do), (ii) knowledge based on-line help (35% of your peers do) or (iii) an immediate pension estimate for the member (53% of your peers do).
- You do not have an information line, whereas 35% of your peers do.
- You do not offer voicemail as an alternative to queueing, versus 35% of your peers who do.

### Your Total Relative Complexity of 30 is below the peer median of 44.

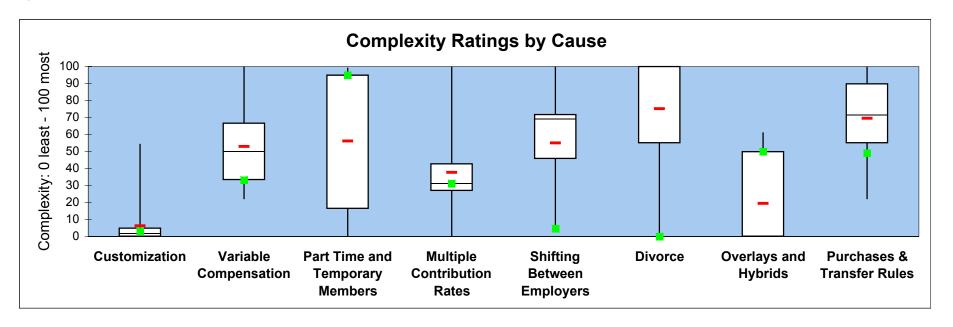


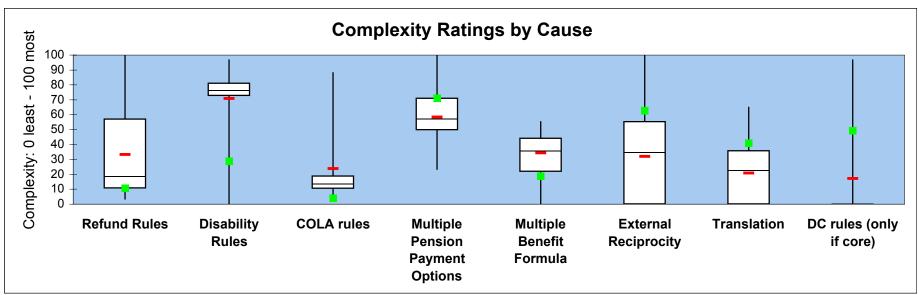
The Complexity Scores are relative scores. A low Relative Complexity Score does not mean that your system is not complex, rather it means that your system is relatively less complex than your peers. All retirement systems are extremely complex, so even the system that has a 0 Total Relative Complexity Score is still extremely complex.

All systems are complex. This score is relative to other systems. Examples where you have lower relative Complexity include:

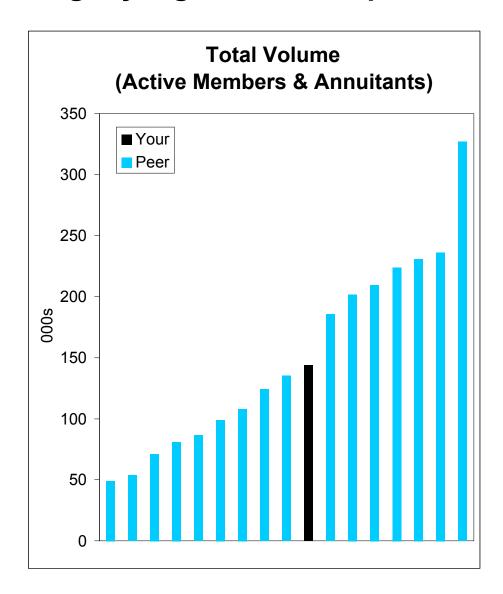
- Multiple Benefit Formula. (i) You use only 1 rule set to determine qualification for retirement (the peer maximum is 17 rule sets), (ii) you use only 1 salary definition (the peer maximum is 6 salary definitions) and (iii) you use only 1 formula percentage rule set (the peer maximum is 10 rule sets).
- Disability. (i) You rely on a Social Security ruling to determine whether a member qualifies for long-term disability (92% of your peers manage their own processes), (ii) the amount of a member's disability benefit does not vary depending on whether the disability is work or non-work related (69% of your peers must deal with varying amounts), and (iii) you do not reduce disability payments if the member has other sources of income while receiving a disability benefit (50% of your peers reduce the benefit).

## Your Relative Complexity by underlying cause compares to your peers as follows:





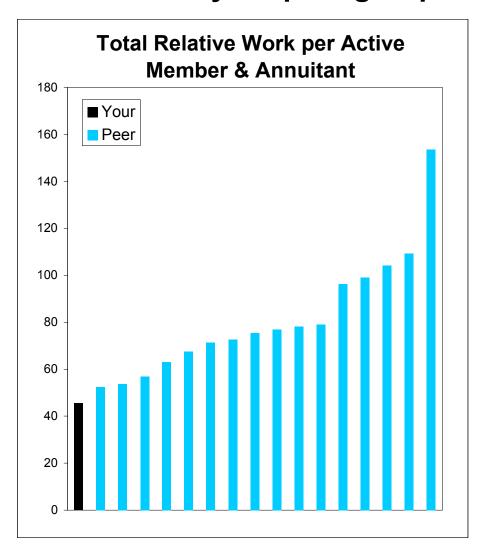
## Your total active members and annuitants of 144,045 is slightly higher than the peer median of 135,400.



Total volume is the sum of your active members and annuitants. We did not include inactive members, because for most systems, the costs associated with inactives are small. Also, the work caused by inactive members is captured in our relative work measure summarized on the next page.

There is a relationship between cost per member and total volumes. The systems with the fewest members suffer a cost disadvantage relative to the systems with the most members.

### Your Total Relative Work per active member and annuitant is the lowest of your peer group.

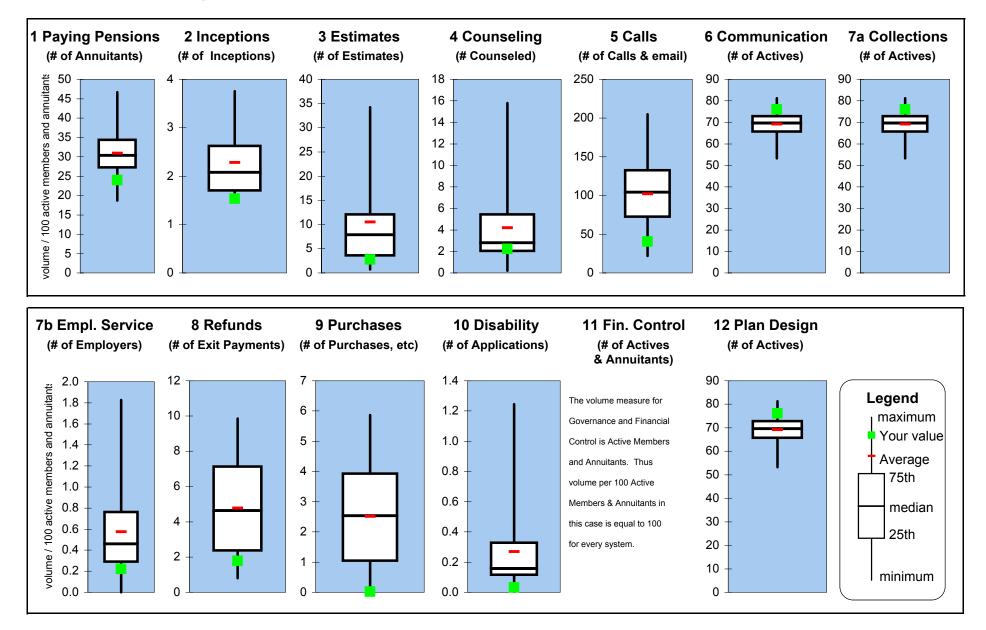


Your Total Relative Work depends on both Activity Volumes and the amount of effort expended per unit of volume.

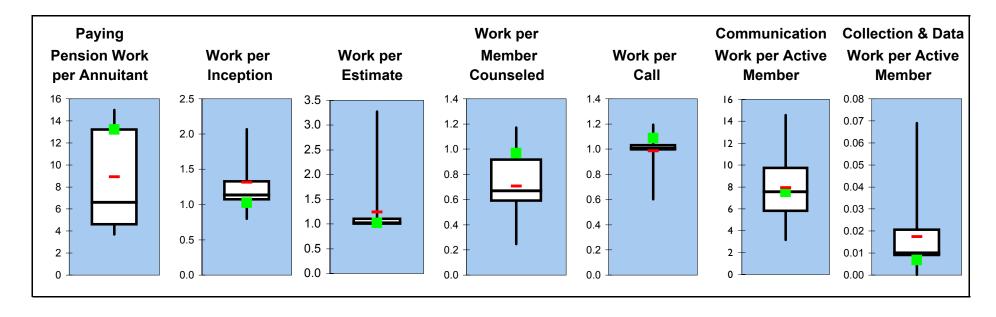
- 1. Activity Volumes: The relationship between work and activity volumes is straightforward. If your activity volumes increase then your work increases. Activity volumes can vary widely between systems. For example, you counseled 2.2 members for every 100 active members & annuitants. This compares to a low of 0.2 and a high of 15.8 for your peers.
- 2. Effort Expended. Effort is less obvious. The effort expended per unit of activity volume varies widely. For example, a member counseled 1-on-1 in the field requires more effort than a member counseled in a small-group session in-house. Therefore we adjust for difference in effort expended. Your 'Work per Member Counseled' was 1.0. This compares to a low of 0.2 and a high of 1.2. In other words you did 3.9 times more work per member counseled than your lowest peer, and 83% of the work per member counseled of your highest peer.

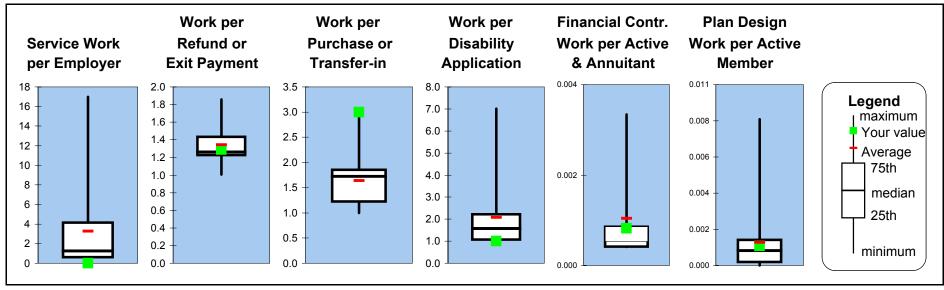
Your Activity Volumes and Work per Unit of Activity Volume are summarized on the next two pages.

## Your Activity Volumes per 100 active members and annuitants compare to your peers as follows:

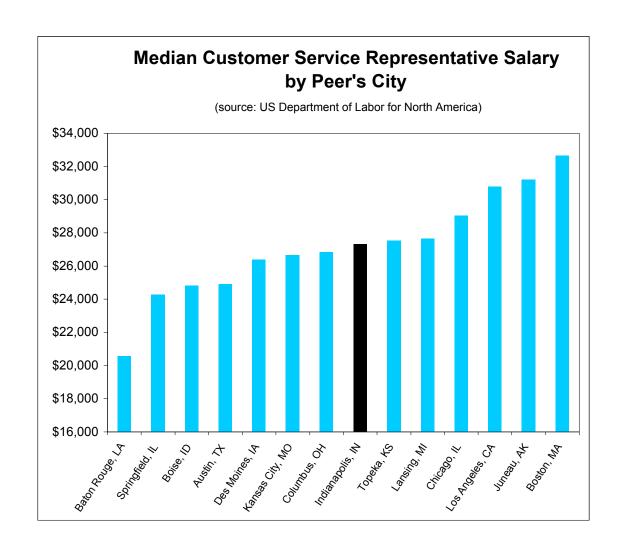


## Your relative effort expended for each unit of activity volume compares to your peers as follows:

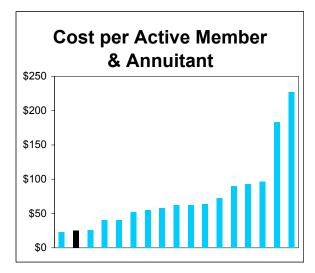


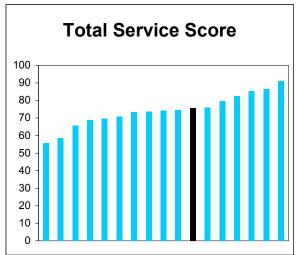


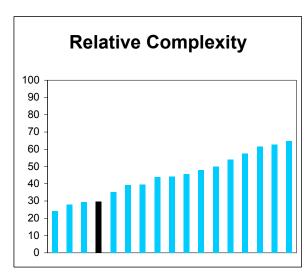
## The Cost Environment that you operate in is close to the peer median.

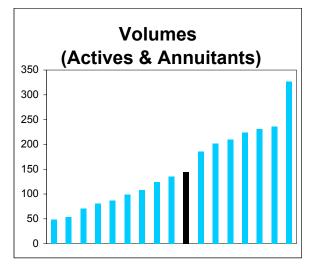


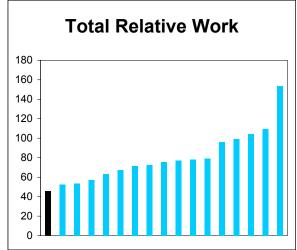
### Your low cost reflects, in part, the impact of lower Complexity and Work, plus slightly higher Volumes

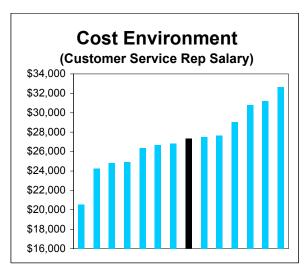


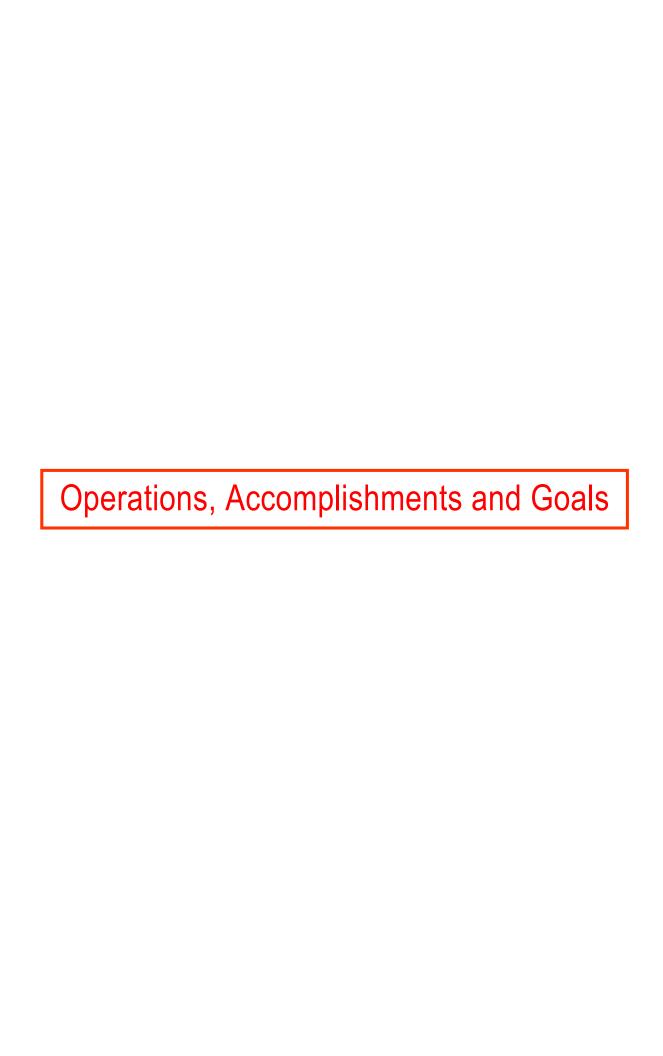












# Operations, Accomplishments, and Goals

Fiscal Year 2004 Goals and Accomplishments

- Implementation of Voluntary Pre-Tax Contribution Option for Active Members.
   Ongoing
- Improve communication with potential retirees
  Ongoing Began presenting pre-retirement workshops via video conferencing.
- Continued Improvement of Fund's website Ongoing
- Improve employer-fund communications
   Ongoing Implemented employer only quarterly newsletter. Implemented employer information session via video conferencing.
- Discover more ways of utilizing electronic processes to reach goal of being paperless

Ongoing - Added the capability to view monthly direct deposit receipts on the web. Members may now elect out of receiving paper receipts via mail. Members may also opt out of receiving paper copies of quarterly statements and view them on the web.

- Introduce system of telephone counseling to save member travel time Completed
- Finish transition to Siris (State of Indiana Retirement Information System)
  Completed
- Issue quarterly benefit entitlement statements to active members Completed

#### Fiscal Year 2003 Goals and Accomplishments

- Continue Benchmarking process Ongoing
- Audit of Member Health Plan Completed
- New asset allocation study for employer funds Completed
- Diversification into public securities, including venture capital and real estate Completed
- Continue to provide quality service and enhance system operations Ongoing
- Develop member survey for services Ongoing
- Change Health Plan and Advisor
   Changing Health Plan is in process. A Health Plan Advisor has been chosen.
- Continue improvement of member education processes Ongoing
- Review work processes and change for efficiency and effectiveness Ongoing
- Enable electronic reporting with employers.
   Completed Employers can deposit funds through EFT, and can use electronic messaging to provide wage and contribution reports.

#### Fiscal Year 2002 Goals and Accomplishments

- Improve benefit estimate format and clarity Ongoing
- Enhance call center performance by utilizing the latest technology Ongoing
- Issue an annual benefit entitlement statement to active members Completed
- Complete feasibility and implementation study for obtaining record-keeping services for Annuity Savings Investment Account program Ongoing
- Develop a process for employers to report employee contributions on a "payroll by payroll" basis
   Ongoing
- Continue Benefits Management Benchmarking process
   Ongoing See details in "Benchmarking" section.
- Establish in-service programs for staff Ongoing
- Begin and complete a Benchmarking of Investment Processes Completed
- Continue improvement of member education processes
   Ongoing Implemented use of educational information on the website and quarterly newsletters.
- Work with PERF to jointly improve out-reach programs Ongoing
- Seek to develop a variable annuity option
   Completed A variable annuity option was found to be not viable.

#### Fiscal Year 2001

#### Goals and Accomplishments

- Pursue and complete an Investment Fiduciary Audit Completed
- Begin and complete a Benefits Management Benchmarking process
   Completed
- Improve home page on the World Wide Web
   Completed Received commendation from CEM Benchmarking Service.
- Allow members to access their quarterly statements via the internet Completed
- Allow school corporations to transmit their employer payment via the Internet.
   Completed
- Seek to develop retirement outreach programs using laptops and digital connections to meet with prospective retirees in their district
   Full development will begin when the SIRIS project is completed.
- Develop the process to ensure adequate control and audit trails are incorporated in the computer system. Enhance the monitoring and integrity of employer data utilized in retirement benefits. Develop criteria for and recruit internal auditing support staff.
  - On going Initiated the examination and evaluation of the adequacy and effectiveness of the Plan's system of internal control. Implemented the internal audit process to examine and evaluate the investment, accounting, financial reporting and member retirement benefit practices established to ensure compliance with policies, plans, procedures, laws and regulations and internal control. Administrative policies and procedures have been documented to ensure management directives are implemented.
- Enhance investment options of employer assets Completed

INDIANA STATE TEACHERS' RETIREMENT FUND 150 W. MARKET STREET, SUITE 300 INDANAPOLIS, IN 46204 (317) 232-3860